

REPORT
OF THE
BOARD OF GOVERNORS
OF THE
UNIVERSITY OF
ALBERTA
1929-30



THE PRESIDENT'S REPORT
THE FINANCIAL STATEMENT

REPORT
OF THE
BOARD OF GOVERNORS
OF THE
UNIVERSITY OF
ALBERTA



THE UNIVERSITY OF ALBERTA
EDMONTON, ALBERTA

The Report of the President

To the Lieutenant-Governor in Council.

Sir:

On behalf of the Board of Governors of the University of Alberta, and in accordance with section 31, subsection 2, of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta.

The Report consists of two parts, Part I—The Report of the President of the academic work of the University for the academic year closing August 31st, 1930, and Part II—The Financial Statement for the fiscal year closing, in accordance with the regulations of the Provincial Government, on March 31st, 1930.

HORACE HARVEY,

Chairman.

R. C. WALLACE,

President.

PART I.

The Report of the President

To the Board of Governors
of the University of Alberta.

Gentlemen :

In accordance with the requirements of the University Act, section 66, subsection 7, I beg to submit, herewith, a report of the work of the University for the academic year ending August 31st, 1930, the twenty-second annual report of the University, the twentieth to your honorable body.

The academic year of the University (September 1st to August 31st) does not conform to the fiscal year (April 1st to March 31st) for which in accordance with the regulations of the Provincial Government the financial statement is presented as the second part of this Report. The academic work of the University can be treated adequately only on the basis of the academic unit—the University year from September 1st to August 31st. It has therefore been found necessary in presenting the report to deal with different twelve-month periods—one for the academic work of the University, and one for the financial report for the Government year.

CHANGES IN STAFF.

Dr. Adolf Lehmann, who was the first professor of Chemistry at the University, and who had given long and wholehearted service to the institution, retired on August 31st, 1930, by reason of illness. His fine personality, and his unselfish devotion to his work will long be remembered by students and staff alike. The University conferred on him at the May Convocation the honorary degree of Doctor of Laws. Dr. J. W. Shipley, a graduate of Manitoba and Harvard universities, and a chemist of high reputation, has been appointed to succeed Dr. Lehmann as head of the Chemistry department. Mr. A. L. Burt, the head of the department of History, was called to an important position in the Graduate School in the University of Minnesota and resigned on August 31st, 1930. Mr. Burt had also given long service to this University, and had to an unusual degree impressed his personality and his alertness of mind on successive generations of students of history. The position which he has vacated has not yet been filled, but temporary arrangements have been made

until his successor is appointed. Dr. N. B. Eddy of the department of Physiology and Pharmacology received an important research appointment in the University of Michigan, and Dr. S. Gelfan, a graduate of the University of California and assistant at the University of Chicago, was appointed as assistant professor in his place. Dr. S. Nielson of the Faculty of Law, who was on leave of absence for a year to lecture in Leland Stanford University, resigned to accept a permanent position in that university. Mr. M. M. MacIntyre of the Dalhousie and Harvard Law Schools, has been appointed in his place. The complete list of resignations, appointments and promotions is given below.

During the year under review, two members of the staff were granted sabbatical leave, Dr. Coar of the department of Modern Languages for the whole year, and Dr. Broadus of the department of English for the second part of the year. Dr. Coar spent the year in Germany, while Dr. Broadus spent his time in Italy, Paris and Oxford. Sabbatical leave was granted for the succeeding year to Dr. Lang of the department of Physics, who is to work in Berlin, and Mr. Sinclair of the department of Animal Husbandry, who will work at the Rowatt Institute in Aberdeen, Scotland. The stimulus of other institutions, and the facilities of large libraries and laboratories, are contributions to our own University life which will be more and more evident as the years go on, through the adoption of this principle of leave. Leave was granted without salary to Mr. S. Nielson to fill a temporary position in Leland Stanford University and to Mr. L. H. Nichols of the department of Physics to pursue his studies and research work in Meteorology at McGill University, also to Dr. J. W. Scott formerly of the department of Biochemistry who spent the time in the London hospitals and at McGill University, and has returned to a position in Internal Medicine; and to Dr. H. M. Vango of the department of Pathology and Medical Jurisprudence, who spent the summer months with Professor Sydney Smith, the authority in Forensic Medicine in Edinburgh University, and with Professor Haberda of the Medico-Legal Institute of Vienna.

No changes have taken place in connection with the organization of the faculties during the current year. The following are the statistics with reference to teaching staff for the year:

Full-time Staff.

Professors	40
Associate Professors	21
Assistant Professors	16
Lecturers	14
Instructors	8
Demonstrators	1
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Total.....	100

Part-time Staff.

Professors	5
Associate Professors	7
Assistant Professors	10
Lecturers	20
Instructors	18
Demonstrators	11
Total	71

Library.

Librarian	1
Assistant Librarians	3
Sessional help	3
Total	7

Extension Department.

Director	1
Librarian	1
Lecturer	1
Total	3

Industrial Laboratory.

Director	1
Assistant	1
Total	2

Department of Industrial Research.

*Research Professors	2
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Promotions of Staff.

The following promotions of members of the staff were made by the Board of Governors during the year:

Robert Starr Leigh Wilson, B.Sc., professor of Civil Engineering and head of the department of Civil Engineering to be dean of the Faculty of Applied Science.

Robert McLeod Shaw, B.A., M.D., C.M., D.P.H., from associate professor to professor of Bacteriology and Hygiene.

Harry Ernest Bulyea, D.M.D., from associate professor to professor of Operative Dentistry, director of the School of Dentistry.

Alexander Joseph Cook, B.Sc., M.A., Ph.D., from assistant to associate professor of Mathematics.

Harry Alexander Gilchrist, D.D.S., from assistant to associate professor of Prosthetic Dentistry.

Gordon Cameron Gray, M.B., F.A.C.S., from assistant to associate professor of Surgery.

*Note.—Under the direction of the Research Council of Alberta two professors devote full time to research work. This work is carried on jointly by the Government of Alberta and the University.

Wilfred Alfred Wilson, M.D., C.M., from assistant to associate professor of Surgery.

Irving Russell Bell, B.A., M.B., from assistant professor of Therapeutics and lecturer in Medicine to associate professor of Therapeutics and assistant professor of Medicine.

Norman McKee Stover, M.Sc., Ph.D., from lecturer to assistant professor of Chemistry.

John MacIntyre Cassels, B.A., from lecturer to assistant professor of Political Economy.

Helen Isabella Milne, B.S.A., from instructor to lecturer in Poultry.

Robert William Bradley, D.D.S., from instructor to lecturer in Operative Dentistry.

Resignations of Staff.

Robert William Boyle, M.Sc., Ph.D., F.R.S.C., dean of the Faculty of Applied Science and head of the department of Physics to be head of the Physics and Engineering Physics Division of the National Research Council of Canada.

Duncan Alexander MacGibbon, M.A., Ph.D., professor of Political Economy and head of the department of Political Economy to be Commissioner of the Dominion Grain Commission, Winnipeg.

Adolf Ludwig Ferdinand Lehmann, B.S.A., Ph.D., professor of Chemistry and head of the department of Chemistry, retired.

Alfred Leroy Burt, M.A., professor of History and head of the department of History to accept a position in the department of History, University of Minnesota.

Nathan B. Eddy, M.D., associate professor of Physiology and Pharmacology to accept a position in the University of Michigan.

Thomas Herbert Mather, B.S.A., M.Sc., Ph.D., assistant professor of Soils.

Sigvald Nielson, B.S., LL.B., J.D., assistant professor of Law to accept a position in Leland Stanford University.

John W. Sutherland, M.Sc., lecturer in Chemistry.

H. Kohnke, Ph.D., sessional lecturer in German.

Hugh MacCrostie, L.D.S., D.D.S., lecturer in Dental Medicine.

J. Friend Day, M.A., lecturer in Political Economy.

A. J. Anderson, C.A., lecturer in Accountancy.

Miss Ann Shaver, B.A., instructor in Household Economics.

Miss Jean Murray, M.A., instructor in History.

Wallace Sterling, M.A., instructor in History.

H. E. Rawlinson, M.D., demonstrator in Anatomy.

Leave of Absence.

Edmund Kemper Broadus, Ph.D., professor of English and head of the department of English, on sabbatical leave for half a year from January, 1930.

John Firman Coar, Ph.D., professor of German, on sabbatical leave for one year from September, 1929.

Robert James Lang, Ph.D., associate professor of Physics, on sabbatical leave for one year to pursue study in Europe, September, 1930.

Robert David Sinclair, B.S.A., M.S., associate professor of Animal Husbandry, on sabbatical leave to pursue study in Europe for one year, September, 1930.

New Appointments.

George Hunter, M.A., B.Sc., D.Sc. (Glasgow), to be professor of Biochemistry and head of the department of Biochemistry.

George Alexander Elliott, M.A. (Manitoba), to be professor of Political Economy and head of the department of Political Economy.

Edward Hunter Gowan, Ph.D. (Oxon), to be lecturer in Physics.

Richard Proctor, M.D. (Manitoba), to be lecturer in Radiology.

George Alexander Gerneroy, L.D.S., D.D.S., to be lecturer in Dental Medicine.

John Albert Blezard, M.B., M.D.C.M., to be lecturer in Anaesthesia.

Helmut Kohnke, Ph.D., to be sessional lecturer in German.

Harry W. Hewetson, B.A. (Toronto), M.A. (British Columbia), to be lecturer in Political Economy.

Arnold J. Anderson, C.A., to be lecturer in Accountancy.

Hector Allard, B.A. (Manitoba), M.A. (Manitoba), B.A. (Oxon), to be lecturer in French.

John W. Sutherland, M.Sc. (Alberta), to be lecturer in Chemistry.

Francis G. Winspear, C.A., to be lecturer in Accountancy.

Alfred Leahey, B.S.A. (Alberta), M.Sc. (Alberta), to be lecturer in Soils and Research Assistant.

George Henry Malcolmson, B.A., M.D. (Toronto), to be honorary instructor in Radiology.

Bernard Richard Mooney, M.D. (Western), to be honorary instructor in Radiology.

Robert U. Harwood, M.Sc. (Alberta), to be instructor in Biochemistry.

Joseph Fisher, B.A. (Oxon), to be instructor in English.

Miss Rieta Brown, B.Sc., M.A. (Alberta), to be instructor in Household Economics.

Miss Helen Milne, B.S.A. (British Columbia), to be instructor in Poultry.

Geoffrey Bradford Taylor, M.Sc. (Alberta), to be assistant registrar.

As from September 1st, 1930.

John Wesley Shipley, M.A., Ph.D. (Harvard), to be professor of Chemistry and head of the department of Chemistry.

Ross W. Collins, B.A. (Acadia), M.A. (Acadia), graduate of the Presbyterian College, Halifax; B.D. (Union Theological Seminary), Ph.D. (Columbia), to be assistant professor of History.

M. M. MacIntyre, B.A. (Mount Allison), LL.M. (Harvard), to be assistant professor of Law.

Samuel Gelfan, A.B. (California), Ph.D. (California), to be assistant professor of Physiology.

William D. McFarlane, B.Sc. (Toronto), M.A. (Toronto), to be assistant professor of Physiology.

John W. Scott, M.D., C.M., to the position of lecturer in Clinical Medicine after a year's leave of absence.

George Buxton, M.A. (Manitoba), Ph.D. (Paris), to be lecturer in Canadian History.

Walter Bennett Harvey, B.A. (Manitoba), LL.B., M.A. (Manitoba), to be lecturer in Political Economy.

Darol K. Froman, B.Sc. (Alberta), M.Sc. (Alberta), Ph.D. (Chicago), to be lecturer in Physics.

Robert McDonald Hardy, B.Sc. (Manitoba), M.Sc. (McGill), to be sessional lecturer in Civil Engineering.

Donald Cameron, B.Sc. (Alberta), to be lecturer in the department of Extension.

Miss Alice Barber, B.Sc. (Toronto), to be instructor in Household Economics.

John W. Howe, B.S.A. (Alberta), M.Sc. (Iowa), to be sessional instructor in Animal Husbandry.

John W. Porteous, B.Sc. (Alberta), to be instructor in Electrical and Civil Engineering.

REGISTRATION BY FACULTIES.

As distributed in the various faculties and schools the numbers are as follows:

Total Registration 1578

(a) By Faculties:

1. <i>Faculty of Arts and Sciences</i>	661
B.A. and B.Sc. in Arts	387
B.Sc. in Pharmacy	8

School of Commerce :		
B.Com.	78	
School of Household Economics :		
B.Sc.	75	
B.H.Ec.	4	
	—	79
Special Students		18
Combined Courses :		
Arts and Agriculture	7	
Arts and Applied Science.....	6	
Arts and Medicine	48	
Arts and Dentistry	3	
Arts and Law	27	
	—	81
2. <i>Faculty of Applied Science</i>		235
Civil, Mining, Electrical and Chemical..	229	
Combined Courses :		
Arts and Applied Science	6	
3. <i>Faculty of Agriculture</i>		126
Agriculture	81	
Diploma Course	3	
Special students	2	
Combined Courses :		
Arts and Agriculture	7	
Short Course in Dairying	3	
Agricultural Short Course	30	
4. <i>Faculty of Law</i>		50
Law	23	
Combined Courses :		
Arts and Law	27	
5. <i>Faculty of Medicine</i>		313
Medicine	155	
School of Dentistry :		
B.Sc.	35	
School of Nursing :		
B.Sc.	9	
Diploma	63	
	—	72
Combined Courses :		
Arts and Medicine	48	
Arts and Dentistry	3	
	—	51
6. <i>School of Pharmacy</i>		37
B.Sc.	8	
Diploma	29	

7. <i>School of Education</i>	8
8. <i>Correspondence Courses</i>	77
9. <i>B.D.</i>	9
10. <i>Summer Session (1930)</i>	114
11. <i>Graduate Students</i>	75

Arts and Sciences:

M.A.	35
M.Sc.	13
B.Educ.	5
—	53

Medicine	0
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Applied Science:

M.Sc.	1
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Agriculture:

M.Sc.	8
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Special Graduate Students	13
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Total	1705
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Less duplicates in double courses and Summer Session	127
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Total	1578
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STUDENT REGISTRATION

The following classification of the student body under various heads—academic, social and religious—will give some indication of the manifold interests that enter into the University:

Registration by Years.

	Men.	Women.	Total.
First Year	195	79	274
Second Year	243	132	375
Third Year	181	60	241
Fourth Year	160	74	234
Fifth Year	59	1	60
Sixth Year	17	2	19
Graduate Students	57	18	75
Correspondence	39	38	77
B.D.	9	0	9
Short Course in Dairying	3	0	3
Diploma Course in Agriculture	3	0	3
Diploma Course in Nursing	0	63	63
Special Students	13	8	21
Summer Session (1930)	74	40	114

Agricultural Short Course	25	5	30
Graduate School of Education	2	6	8
	<hr/>	<hr/>	<hr/>
	1080	526	1606
Less duplicates in Summer Session	18	10	28
	<hr/>	<hr/>	<hr/>
Total	1062	516	1578

The Religious Affiliation of the Students of the University
as shown by their Registration Cards

United Church of Canada	525	Mennonite	3
Church of England	180	Agnostic	2
Presbyterian	151	Free Methodist	2
Roman Catholic	118	International Bible Stu-	
Baptist	53	dents' Association	2
Lutheran	39	Moravian	2
Hebrew	28	Nazarene	2
Methodist	19	Non-denominational	2
Greek Orthodox	13	Unitarian	2
Christian Science	11	Nonconformist	1
Ukrainian Greek Ortho-		Reformed Church	1
dox	11	Seven Day Adventists	1
Church of Christ	8	Protestant	182
Jewish	8	None	8
Greek Catholic	6	Not specified	97
Evangelical Church	5	Summer Session (1930).....	114
Latter Day Saints	5		<hr/>
Russian Greek Orthodox..	5	Total	1606
Less duplicates in Summer Session			<hr/>
			28
			<hr/>
Total			1578

Registration of Students According to National Origin.

The following classification of the student body shows to what a large extent the Province is still dependent upon immigration, the vast majority of our students having come here with their parents from other countries. The numbers born in the various countries mentioned are indicated by the figures opposite their names:

1. British Empire	1221
(a) Canada	1087
Alberta	619
Ontario	108
Manitoba	74
Saskatchewan	74
British Columbia.....	63
Nova Scotia	31
New Brunswick	18
Quebec	18
Prince Edward Island	8
Yukon	2

The 619 from Alberta were distributed as follows:

Edmonton	161	Lamont	11
Calgary	67	Pincher Creek	11
Medicine Hat	29	High River	10
Lethbridge	20	Banff	9
Red Deer	19	Macleod	9
Lacombe	14	Innisfail	8
Vegreville	13	Stettler	8

Camrose	7	Tofield	3
Fort Saskatchewan.....	7	Taber	3
Mundare	7	Vulcan	3
Ponoka	6	Barons	2
Claresholm	5	Blackie	2
Granum	5	Bremner	2
Lloydminster	5	Carmangay	2
Raymond	5	Carstairs	2
Wetaskiwin	5	Donalda	2
Frank	4	Eckville	2
Islay	4	Edberg	2
Leduc	4	Gleichen	2
Morinville	4	Glidehurst	2
Nanton	4	Grassy Lake	2
Soda Lake	4	Killam	2
Vermilion	4	Kitscoty	2
Bawlf	3	Magrath	2
Bowden	3	Myram	2
Bruderheim	3	Olds	2
Cayley	3	Penhold	2
Chipman	3	Pibroch	2
Daysland	3	Shandro	2
Didsbury	3	Stony Plain	2
Halkirk	3	Stavely	2
Innisfree	3	Viking	2
Kitscoty	3	Wainwright	2
Strathmore	3		

and one each from each of the following 62 towns:
Airdrie, Alderson, Alix, Ardrossan, Bankhead,
Bashaw, Beaver Hills, Bellevue, Big Valley, Brant,
Bon Accord, Bow Island, Canmore, Castor, Champion,
Clover Bar, Cochrane, Coleman, Content, Edgerton,
Edson, Elk Point, Falun, Fishburn, Foreman, Glen-
garden, Glenwoodville, Hilliard, Hillsdale, Hughenden,
Inland, Irma, Irvine, Kingman, Kipp, Lavoy, Lille,
Lorand, Mannville, Maybutt, Mere, Minburn, Moun-
tain View, Munson, Musidora, Nemiskam, New Day-
ton, Okotoks, Onoway, Pakan, Pekisko, Rimbey,
Seven Persons, Smoky Lake, Spruce Grove, Stonelaw,
Strome, Star, Sunnyside, Three Hills, Walsh, Winter-
burn.

(b) Other parts of the British Empire	134
England	82
Scotland	26
Ireland	12
Wales	6
Newfoundland	3
Isle of Man	2
New Zealand	1
South Africa	1
India	1

2. Foreign Countries 190

(a) United States (27 States) and Alaska	157
North Dakota	23
Minnesota	20
Iowa	12
Michigan	10
Nebraska	7
Washington	7
Illinois	6
Idaho	6
Missouri	6
Oklahoma	5
Pennsylvania	4
Wisconsin	4
California	3
New York	3
Indiana	3
Massachusetts	3

Colorado	2	Nevada	1
Kansas	2	South Dakota	1
Montana	2	Texas	1
Ohio	2	Vermont	1
Maine	1	Alaska	1
New Jersey	1		

(b) Foreign countries other than the United States	53
Russia	15
Poland	7
Ukraine	6
Denmark	5
Japan	5
Belgium	2
Holland	2
Norway	2
Argentina	1
Austria	1
China	1
Galicia	1
India	1
Persia	1
Portugese W. Africa..	1
Roumania	1
Sweden	1
3. Countries not specified	81
4. Summer Session (1930)	114
Total	1606
Less duplicates	28
Total	1578

Registration of Students According to Occupation of Parents.

Farmers and Ranchers	272	Dairymen	6
Merchants	130	Hotel Proprietors	6
Doctors	46	Financial Agents	5
Railway Employees	38	Jewellers	5
Contractors	31	Bakers	4
Ministers	30	Commissioners	4
Managers	29	Millers	4
Lawyers	28	Newspapermen	4
Clerks	25	Architects	4
Engineers	24	Bankers	3
Real Estate Brokers	22	Blacksmiths	3
Carpenters	19	Conductors	3
School Teachers	19	Custom's Appraisors	3
Dentists	15	Electricians	3
Druggists	15	Painters	3
Lumbermen	15	Advertising Managers	2
Salesmen	15	Auctioneers	2
Accountants	14	Bank Managers	2
Insurance Brokers	14	Brass Moulders	2
Civil Servants	12	Caretakers	2
Grain Buyers	12	Court Reporters	2
Labourers	12	Judge	2
Travellers	12	Inspectors of Schools	2
Mechanics	11	Masons	2
Postal Employees	11	Musicians	2
Superintendents	10	Photographers	2
Miners	9	Superintendent of Schools.....	2
Printers	8	Tailors	2
Professors	8	Undertakers	2
Brokers	7	Well Drillers	2
Manufacturers	7	Agent	1
Editors	6	Army Officers	1

Attendance Officer	1	Justice of Supreme Court	1
Baggage Master	1	Magistrates	1
Barber	1	Pensioner	1
Brewery Foreman	1	Plumber	1
Building Inspector	1	Policeman	1
Cabinet Minister	1	Rabbi	1
Carriage Builder	1	Saddler	1
Chemist	1	Secretary	1
Constable	1	Sheriff	1
Deputy Sheriff	1	Shoemaker	1
Director	1	Surveyor	1
Fireman	1	Telegraph Operator	1
Foreman	1	Trader	1
Garage Proprietor	1	Deceased	56
Gardener	1	Retired	31
Health Officer	1	Not specified	335
Herdsman	1	Summer Session (1930)	114
Immigration Agent	1		
Inspector	1	Total	1606
Less duplicates in Summer Session			28
Total			1578

Registration of Students by Home Addresses.

Canada and Newfoundland	1436	Poland	1
United States	6	Scotland	1
England	2	Not specified	42
Japan	2	Summer Session (1930)	114
Holland	1		
Germany	1	Total	1606
Less duplicates in Summer Session			28
Total			1578

Canada and Newfoundland	1436		
Alberta	1254	Nova Scotia	2
Saskatchewan	81	N.W. Territories	2
British Columbia	68	New Brunswick	1
Manitoba	14	P.E. Island	1
Ontario	12	Newfoundland	1
Alberta	1254		
Edmonton	505	Claresholm	7
Calgary	157	Didsbury	7
Medicine Hat	34	Innisfail	6
Lethbridge	31	Vulcan	6
Red Deer	17	Wetaskiwin	6
Camrose	13	Blairmore	5
Lamont	13	Cayley	5
Banff	12	Delia	5
Vegreville	12	Edson	5
Stettler	11	Fort Saskatchewan	5
High River	10	Granum	5
Vermilion	10	Killam	5
Pincher Creek	9	Olds	5
Lacombe	8	Smoky Lake	5
Leduc	8	Taber	5
Macleod	8	Viking	5
Ponoka	8	Chipman	4

Donalda	4	Delburne	2
Drumheller	4	Duchess	2
Lomond	4	Eckville	2
Kitscoty	4	Edberg	2
Morinville	4	Gadsby	2
Mundare	4	Gleichen	2
New Dayton	4	Glidehurst	2
Royal Park	4	Hanna	2
Tofield	4	Hardisty	2
Waskatenau	4	Hughenden	2
Alliance	3	Innisfree	2
Barons	3	Inland	2
Bawlf	3	Jasper	2
Blackie	3	Lavoy	2
Brooks	3	Lougheed	2
Bruderheim	3	Loyalist	2
Consort	3	Magrath	2
Daysland	3	Minburn	2
Foremost	3	Ohaton	2
Islay	3	Okotoks	2
Kingman	3	Penhold	2
Mannville	3	Pibroch	2
Nanton	3	Raymond	2
Sedgewick	3	Rumsey	2
Spruce Grove	3	Stony Plain	2
Strome	3	Strathmore	2
Wainwright	3	Sylvan Lake	2
Athabaska	2	Three Hills	2
Big Valley	2	Wealthy	2
Cardston	2	Westlock	2
Carmangay	2	Willingdon	2
Castor	2	Winterburn	2
Coaldale	2		

and one each from the following 130 places: Acadia Valley, Acme, Alcondale, Altario, Andrew, Angle Lake, Ardrossan, Barnwell, Barrhead, Bashaw, Bearberry, Beaver Lodge, Beiseker, Bittern Lake, Black Diamond, Blackfalds, Bon Accord, Bowell, Bow Island, Brant, Bremner, Buffalo View, Byemore, Cadomin, Canmore, Carbon, Carlson, Carolside, Carsland, Carstairs, Cereal, Chauvin, Clandonald, Clive, Clover Bar, Cluny, Coalhurst, Cochrane, Coleman, Conrich, Cowley, Craigmyle, Crossfield, Delacour, Disant, Edgerton, Eldorena, Elk Point, Elnora, Entwistle, Etzikon, Fenn, Ferintosh, Fishburn, Gainford, Galahad, Gladys, Glenwoodville, Grande Prairie, Hairy Hill, Halcourt, Halkirk, Hilliard, Hope Valley, Hubalta, Hussar, Kealeland, Kingman, Kinsella, Kitscoty, Legion, Leslieville, Lloydminster, Manyberries, Mazeppa, Monarch, Monitor, Morecombe, Morrin, Munson, Nacon, Neerlandia, Nevis, Nobleford, Nordegg, Parkland, Peace River, Pekisko, Phoenix, Provost, Purple Springs, Ranfurly, Raven, Redcliff, Retlaw, Rockyford, Rocky Mountain House, Rosedale, Scandia, Scollard, Scotfield, Shandro, Sibbald, Slawa, Soda Lake, Spring Coulee, Spurfield, Stavely, Staveville, Streamstown, St. Vincent, Sunny Nook, Talbot, Tees, Therien, Trochu, Tudor, Turin, Two Hills, Veteran, Volmer, Warwick, Waterton Lakes, Wayne, Westerdale, Woodhouse, Irma, Jenner, Orion, Oyen.

Saskatchewan			51
Regina	7	Hoosier	3
Moose Jaw	6	Milestone	3
Lloydminster	5	Prince Albert	3
Maple Creek	4	Wilkie	3
Rosthern	4	Estevan	2
Saskatoon	4	Herschel	2
Battleford	3	Rosetown	2
Bruno	3		
and one each from the following 27 places: Aneroid, Bell-carres, Canora, Coleville, Colonsay, Conquest, Corinne, Dun-blanc, Glanaven, Goodeve, Corlitz, Hoey, Hudson's Bay Junction, Kindersley, Luseland, McGee, Macklin, Melfort, Phippen, Prelate, Quill Lake, Euthilda, Shaunavan, Tisdale, Turtleford, Weyburn, Yorkton.			
British Columbia			68
Vancouver	26	Kamloops	3
Trail	7	New Westminster	3
Cranbrook	6		
and one from each of the following 17 places: Algergrove, Bella Coola, Cumberland, Gibson's Landing, Giscome, Hatzic, Kimberley, Mission Mountain, Tolmie, Nakusp, Nanaimo, Nelson, Point Hammond, Rosedale, Rossland, Smithers, Victoria.			
Manitoba			14
Winnipeg	9	Portage la Prairie	1
Brandon	1	Reston	1
Emerson	1	Virden	1
Ontario			12
Port Arthur	2	Fort William	1
Toronto	2	Toronto	1
Ancaster	1	Rodney	1
Aye	1	Smith's Falls	1
Brantford	1	Smithville	1
Nova Scotia			2
Shubanacadie	1	Sydney	1
New Brunswick			1
	Petitcodia.....	1	
Prince Edward Island			1
	Souris.....	1	
North West Territories			2
	Fort Smith.....	2	
Newfoundland			1
	Green's Harbor.....	1	
United States			6
St. Paul, Minn.	2	Silverton, Ore.	1
Chicago, Ill.	1	St. Cloud, Minn.	1
Neperio, Idaho	1		
England			2
Marlborough	1	Northampton	1

Scotland		1
Aberdeen.....	1	
Japan		2
Cufu	1	
Tokio	1	
Germany		1
Berlin.....	1	
Holland		1
The Hague.....	1	
Poland		1
Radymo	1	
Not specified		42

SUMMER SCHOOL AND SUMMER SESSION.

As in previous years the University placed the buildings and equipment, during July and August, at the disposal of the Summer School for Teachers conducted by the Department of Education.

The Summer Session of the Faculty of Arts in which courses leading to a degree were offered was continued. The registration was as follows:

	Men.	Women.	Total.
Registration by Courses	74	40	114
Matriculation Courses:			
German A	3	0	3
First Year Courses:			
Chemistry 1	5	7	12
Latin 1-3	3	3	6
Physics 1	7	1	8
Second Year Courses:			
English 2	15	3	18
French 2	3	2	5
Mathematics 7	11	1	12
Senior Courses:			
Chemistry 42	5	0	5
Classics in English 51	11	3	14
English 63	12	9	21
French 51	2	1	3
Mathematics 55	1	0	1
Political Economy 64	7	2	9
Psychology 51	14	10	24
Psychology 55	10	10	20
Psychology 105	6	3	9
Education 59	3	3	6

CONVOCATION.

The Convocation for the year was held on May 15th, 1930. The total number of degrees granted were:

In course	215
Ad eundem	10
Diplomas in Agriculture	3
Diplomas in Education	7
Diplomas in Nursing	9
Diplomas in Pharmacy	4

The following persons were admitted to degrees in the University:

Admitted to the Degree of Bachelor of Arts.

Archer, Margaret Maie
 Black, Jean Lolita
 Burgess, Emma Evelyn
 Calder, Marguerite Edith.
 Campbell, Winnifred Jean
 Cogswell, Elizabeth Annie
 Cogswell, Margaret Olivia
 Comfort, Agnes May
 Conibear, Mabel Ruth
 Crang, Margaret Tryphena Frances
 Dunlap, Grace Wilma
 Gibbons, Irene Maude
 Gibbs, Muriel Christiana Gabrielle
 Hartley, Ethel May (with second class honours in Latin and French)
 Jones, Lillian Agnes
 Knowlan, Jean Ida Ruth
 Landels, Isabel
 Landels, Eleanor Georgina
 McBain, Dorothy Campion
 McCaig, Alix Margaret
 Macleod, Mona Alix
 MacNab, Jane Josephine
 McNeill, Hazel Campbell (with second class honours in History)
 Meyer, Evelyn Christine
 Millan, Florence Muriel
 Mullett, Gwendolen Hayes (with second class honours in French and first class honours in Latin)
 Pattula, Clara Beatrice
 Riley, Harriet Maude
 Rogers, Siretta
 Roseborough, Margaret Morna (I.O.D.E. Scholar-elect)
 Ross, Helen Madeliene Mary (with first class honours in Classics)
 Sellhorn, Margaret
 Sestrap, Leyda
 Shaw, Muriel Beatrice Duncan
 Sloane, Margaret Sarah
 Smith, Constance Evelyn
 Sorenson, Helen Laura
 Sproule, Dorothea Alberta
 Starkie, Agnes
 Walton, Margaret Annette
 Young, Elsie Park (with first class honours in History)

Younge, Eva Rudder (with first class honours in Philosophy)
Aitken, Howard Donovan
Alexander, Robert Percival
Bennet, Charles Vincent
Bowker, Wilbur Fee
Brown, George Ewart
Comfort, John Benjamin
Craig, Glenn Horace
Downs, William James
Haythorne, George Vickers
Johnston, Walter Herald
Kurimot, Yuichi
McCallum, Donald Ludwig
McDannold, William Herbert
McPherson, James Campbell
Manning, Marshall Edward (with first class honours in History)
Meadows, William Arthur
Morrison, Hugh Whitney (Rhodes Scholar-elect)
Noble, Charles Emerson
O'Neill, Ambrose Joseph
Ougden, Fred Harry
Parlee, William Ogden
Parsons, William Bull
Pauly, Andrew Joseph
Powell, Arthur Joseph Howson
Priestly, Francis Ethelbert Louis
Ricker, Harold Byron
Rothney, John Watson Murray
Sieber, Lawrence Gordon
Smith, Frank MacNeill
Surplis, Herbert David
Thorpe, Arthur
Tingle, Cyril Nisbet

Admitted to the Degree of Bachelor of Arts, Ad Eundem.

Houston, Martha
Onofreyo, Mary
Baepler, Walter August
Smith, Lewis Vincent
Sterling, John Ewart Wallace

Admitted to the Degree of Bachelor of Science in Arts.

Barnett, Ethel Elise
Cautley, Helen Elizabeth
Clifgard, Evelyn Jeanette
Eversman, Lenore Caroline
Gordon, Anita Glenlevit
McLaren, Barbara Alberta
Wells, Janet Georgina
Anderson, Walter Stirling
Ash, Clifford Llewellyn
Campbell, James Allan
Chittick, Harvey Franklin
Edmonds, de Larue Everard
Findlay, Wellington Edward
Gardner, John Smith
Hamilton, Thomas Frederick
Hoover, Worthy
Kelz, Victor Charles

Leger, Frank John
McShane, Kenneth Eugene
Oswald, John MacDonald
Rawlinson, Ronald Pinsent
Richardson, Ronald Ernest (with first class honours in Chemistry)
Salt, Reginald Wilson
Sproule, John Campbell (with second class honours in Geology)
Zeavin, Jacob Meyer.

Admitted to the Degree of Bachelor of Science in Arts, Ad Eundem.

Kohnke, Helmut
Cotsman, Alexander

Admitted to the Degree of Bachelor of Commerce.

Connelly, Josephine Isabell
Fry, Dora
Palmer, Vera May
Barclay, George Franklin
Bentley, James McRae
Bowker, Ernest Elwyn
Butler, John Malcolm
Chant, John Mason
Chritchley, Harry Ford
Hutton, Herbert Hall
Knight, Thomas
Levell, Gillis Murdock
Moran, Nathaniel Raymond
Small, James Alexander

Admitted to the Degree of Bachelor of Commerce, Ad Eundem.

Maley, A Bird

Admitted to the Degree of Bachelor of Science in Pharmacy.

King, Gweyn Elizabeth
McLatchie, Ursula Gwendoline

Admitted to the Degree of B.Sc. in Household Economics.

Bowlen, Mary Helen
Bulyea, Alice Eugenie
Chamberlain, Doris Gertrude
Connors, Gertrude Ethel
Cristall, Ella
Dickson, Mabel Aileen
Duggan, Grace Lesley
Fry, Gladys Alberta
Griffith, Eleanore Mary
Haan, Isabel Florence
Hamilton, Audrey
Johnstone, Isabel Elizabeth
Latam, Violet Wilberta
McCaffary, Theresa Edweena
MacFarlane, Margaret Elizabeth

Admitted to the Degree of B.Sc. in Chemical Engineering.

Kemp, Millard Duncan
Lynn, Stanley Chaplin
McLeod, Norman William
Noble, Charles Emerson

Smith, Eugene Lloyd
Zimmerman, Fred Henry

Admitted to the Degree of B.Sc. in Civil Engineering.

Lucas, John William
McDougall, John Frederick
Neil, John Stuart
Olekshy, Mike Dmytro

Admitted to the Degree of B.Sc. in Electrical Engineering.

Buk, Nicholas
Crath, Boris
Holgate, William Thomas
Litster, James Creighton
Wyllie, Frank James

Admitted to the Degree of B.Sc. in Mining Engineering.

Elves, Harold Raymond
Harcourt, George Alan
Kostash, John Frederick

Admitted to the Degree of B.Sc. in Agriculture.

Askin, Thomas Henry
Bowser, William Earl
Cameron, Donald
Charnetski, Alexander John
Davies, Fred Rees
Erlich, Henry
Fawcett, George Gavin
Grant, Ralph Arthur
Hide, John Clifford
Jellis, William Henry Samuel
Kindt, Arthur Jackson
Little, Walter Carlyle
Milligan, Robert James
Obee, Clement Garner

Admitted to the Degree of B.Sc. in Agriculture, Ad Eundem.

Peto, Frank Herbert
Welsh, John Nickolas

Admitted to the Degree of Bachelor of Laws.

Carnes, Marion Helen, B.A.
Corneille, Eleanor Alecia, B.A.
Cohen, Theodore
Hobbs, Arthur William, B.Sc.
MacKenzie, Donald Bruce, B.A.
Savage, Harold Robbins
Tellier, Lionel
Wershof, Max Hirsch, B.A.

Admitted to the Degree of Doctor of Medicine.

Mahaffy, Charlotte Elizabeth
Wilson, Anna Elizabeth, B.A.
Borrowman, Almer Melvyn Wallace
Brearly, Guy Gage, B.A.
Calder, James

Claxton, Herbert George, B.A.
Foster, Wallace Murray
Greenberg, Claude
Johnston, Fergus Duncan, B.A.
Johnston, Gordon Charles, B.A.
Large, John McKay, B.Sc.
Lobell, Harry Raymond
Macgregor, John Watt, B.A.
MacLean, Thomas Keith
Skitch, Clifford Humphrey, B.A.
Stephens, Clive Wilson
Valens, William Lyall
Walker, Arthur Earl, B.A.
Watts, Ernest Hay, B.A.
Wertenbach, Frederick Edward

Admitted to the Degree of Doctor of Dental Surgery.

Boykowich, Michael Henry
Brown, George Hollis
Brown, Harry Knowlton
Carson, Joseph Edward
Fraser, Sperry David
Wyatt, James Lyle

Admitted to the Degree of Bachelor of Science in Nursing.

Lundy, Marjorie Anne
Thompson, Ruth Martha

Admitted to the Degree of Master of Arts.

Brown, Rieta Luella, B.Sc. (H.Ec.)
Shanks, Margaret Stevenson, B.A.
Cotsman, Alexander, B.Sc. (Arts)
Sterling, John Ewart Wallace, B.A.

Admitted to the Degree of Master of Science.

Brewer, Randolph George, B.Sc. (Arts)
Drake, Wray Vernon, B.Sc. (Arts)
Field, George Sydney, B.Sc. (Applied Science).
Foster, William Robert, B.Sc. (Agricultura)
Hicks, Harold Smith, B.Sc. (Arts)
Peto, Frank Herbert, B.Sc. (Agriculture).
Reiber, Harold George, B.Sc. (Arts)
Welsh, John Nickolas, B.Sc. (Agriculture)
Young, Roland Stansfield, B.Sc. (Agriculture).

Admitted to the Degree of Bachelor of Divinity.

Harback, Frank Rosborough, B.A.
Hart, Thomas, M.A.

Admitted to the Degree of Bachelor of Education.

Simpson, Maimie Shaw, M.Sc.
Swift, William Herbert, M.A.

Admitted to the Degree of Doctor of Laws, Honoris causa.

Selwyn G. Blaylock
John C. F. Bowen
William Harmen Fairfield

Adolf Ludwig Ferdinand Lehmann, B.S.A., Ph.D.
The Honorable Frank Oliver.
John Thomas Ross

Diploma in Agriculture.

Addeman, Jack Frank
Crawford, John Eldred
Keyser, Peter

Diplomas in Education and High School Teacher's Certificate.

Hill, Dorothy Kyle, B.A.
Lehmann, Mary Georgina, B.A.
McBain, Isobel Mary, B.A.
MacNab, Isobel Mary, B.A.
Waldo, Annie Louise, B.Sc.
Cotsman, Alexander, B.Sc.
Smith, Lewis Vincent, B.A.

Diplomas in Nursing.

Alexander, Helen Frances
Croft, Ruby Kathleen
Elves, Rowena Jessie
Esdale, Queena May
Hart, Eva Louise
Hubbs, Grace Jean
Ross, Kathleen Myrtle
Sheldon, Helen Leaman
Sloane, Isabelle Jeanette

Diploma in Pharmacy.

Hole, Anna Regina
Cairns, Keith
Stewart, George Henry
Torrie, Donald Forbes Taylor

Registered Specialists in Medicine.

Dr. W. S. Armstrong	Dr. H. C. Jamieson
Dr. J. W. Auld	Dr. M. R. Levy
Dr. J. A. Blezzard	Dr. D. L. McCullough
Dr. Elizabeth Brunton	Dr. A. R. Munroe
Dr. E. M. Busby	Dr. G. E. Robbins
Dr. W. F. Gillespie	Dr. W. H. Scott
Dr. R. G. Huckell	Dr. G. E. Swallow
Dr. W. H. Hustler	Dr. J. G. Young

Professional Examinations.

Since Convocation, 1929, the following persons have passed the examinations for licence to practise conducted by the University on behalf of the affiliated professional societies:

Accountancy—Gunderson, E. M.; Hutchison, A. M.; Plunkett, D. M.; Poole, C. W.; Reid, W. F.; Simpson, J. S.; Williams, J. D.

Law—Taylor, J.M.; Turner, W. O.

Nursing—Allan, A. R.; Allore, D. J.; Baker, A. J.; Baptist, K. L.; Barron, C. M.; Becker, M.; Biglands, M.; Billsten, E. M.; Birch, C. S.; Blaney, I. G.; Breyer, M. M.; Brown, G.; Burry, D. M.; Byers, D. K.; Bittorf, G. M.; Cayley, E.; Campe, B.; Carley, V. M.; Carnochan,

E. M.; Cashman, G. C.; Chorney, P.; Clarke, C. C.; Cooper, L. E.; Cowan, D. I.; Crickmay, M. A.; Cross, M. F.; Croteau, I. M.; Dawson, A.; Day, N. S.; Dean, C.; Dick, A. V.; Douglas, M. J.; Dunn, G. L.; Duxbury, D. J.; Dwelle, V. G.; Edgar, M.; Ennis, M. E.; Esdale, Q. M.; Fairley, M. L.; Forbes, J. A.; Fretwell, E. M.; Fulton, B. L.; Gammon, D. M.; Grant, H. M.; Haworth, J.; Hayter, I. G.; Henderson, M. A.; Hepburn, E. M.; Herbert, M.; Hilborn, R.; Holm, H. A.; Holmes, E. M.; Hutton, B. G.; Inches, M.; Isaac, M. A.; Jackson, C. N.; Jackson, M. M.; Johnson, E. C.; Jones, C. M.; Keeling, M. H.; Killoran, M.; Kruesel, A.; Kyle, H. D.; Lancaster, G. M.; Landymore, M. A.; Lasuik, N.; Lewis, Z. V.; Lloyd, D. R.; McAnally, A. M.; McAnally, C. C.; McDonald, A. W.; McDonald, F. M.; McHugh, M.; McLean, M.; McNeil, K. E.; McTavish, E. M.; Morrill, I. E.; Murton, M. H.; Nicholson, O. M.; O'Donnell, M.; Palmer, B. A.; Parker, E. L.; Pearson, K. M.; Phillips, M. B.; Picard, E.; Porter, V. D.; Priem, E. M.; Randall, E. A.; Redge, E. L.; Revell, G. A.; Rice-Jones, E. M.; Rooney, K.; Rosoman, M. H.; Rowell, N.; Rowles, M.; Sanford, R. D.; Savich, E.; Scarff, C. A.; Schamuhn, B. L.; Shearer, E. L.; Silver, M. E.; Sissons, M. M.; Smith, A. R.; Sneddon, E.; Spooner, M. E.; Spreeman, L. A.; Symons, A.; Terry, D. H.; Thomas, A. R.; Thompson, R.; Thwaites, D.; Trenholm-Dickson, E. L.; Trent, J. M.; Turner, B. L.; Uhrin, A. L.; Wallace, D. F.; Walker, M. E.; Wetmore, M. E.; White, C.; White, M. E.; Williams, E. L.; Williams, E. M.; Wittmark, G.; Woodsworth, H. L.; Wyatt, M. E.; Yeates, E. M.

Optometry—Krause, W.; Northfield, B.

Pharmacy—Abele, P.; Beaton, C. C.; Brownlee, T.; Dick, T. H.; Hamilton, F. T.; Smith, F.; Young, R.

THE EXTENSION SERVICE.

In the many activities of the Extension department, the broadcasting of lectures and music from the University radio station is becoming increasingly a major part of our Extension service. The personal contact is lacking, and the stimulus of a personality is not so pronounced as in the service through our extension lecturers. It is, however, possible by means of the radio to make available at small personal inconvenience the best that the University has to offer. The experiment which was tried out for the first time during the year under review of giving a course of lectures of university standard on subjects of interest to adults has been remarkably successful. Two courses were given—in English literature and Canadian history—and announcement was made at the beginning of each series as to the books which should be studied. The object of these, and similar courses, is to encourage systematic reading and study at a time when much encouragement is necessary. There has been a very gratifying response.

In the extension work of the University the policy is definitely to refuse to give certification or standing for the work that is done. That can come satisfactorily only in attendance at courses given at the University. The aim is rather to stimulate to higher mental activity and intellectual enjoyment for its own sake. Through lecture, library, debate, film, lantern slide, music and drama, mental

stimulus and aesthetic enjoyment are provided, while agriculture and industry are assisted through technical information and the results of scientific research conducted on the campus. To people throughout the province the University should be the source of knowledge and of inspiration. It is the function of the Extension department to act as the link between University and people to that end.

The following is the summary of the major activities of the Extension department for the year under review:

Extension Lectures.

Number of lectures	339	
Aggregate attendance		36,977
Radio lectures	312	
Total lectures	—	651

Library Service.

Travelling library circulation	13,522	
Open shelf circulation	25,465	
	—	38,987
Package libraries for debaters.....	676	
Other package libraries	526	
	—	1,204
Plays for amateurs, supplied to communities numbering	130	
	—	1,334
		— 38,972

Visual Instruction.

Sets of lantern slide circulated	1,875	
Number of times used	2,820	
Aggregate attendance at lantern slide lectures..		193,108
Sets of moving picture films circulated	414	
Number of times used	628	
Aggregate attendance at moving picture pro- gramme		72,139
		— 265,247

Conference and Exhibits.

Conference :		
University Week for Farm Young People		155
Exhibits :		
Edmonton and Calgary Exhibition, "Made in Edmonton" Exhibition, Seed Fair at Calgary.		

Instruction in First Aid and in Home Nursing.

Number of persons instructed	794	794
Certificates and awards issued	754	

Correspondence Instruction.

Principles of Economics:

Number of students	14	14
Papers corrected	71	

Publications.

Press Bulletin:

Number of bulletins issued	4	
Average circulation		3,800
Aggregate circulation	15,200	

Agricultural Publications:

Number sent out during the year	6,344	
Individual requests received		1,800
Total number sent out since Jan. 1, 1923.....	75,590	
Bulletins distributed prior to Jan. 1, 1923, approximately	25,000	
Recorded number of individuals reached by the services of the department during the year		347,759

Recapitulation.

Total aggregate attendance at lectures, lantern slide lectures, moving picture exhibitions, First Aid and Home Nursing classes, and Farm Young People's Week...	303,173
Total circulation of books, package libraries and plays.....	38,321
Total circulation of Press Bulletins and Agricultural Bulletins	21,544

REPORT OF THE DEAN OF THE FACULTY OF ARTS AND SCIENCES

For the enrolment of students pursuing courses under the jurisdiction of the Faculty of Arts and Sciences during the past session a grand total of 661 was reached as compared with 753 a year ago—an apparent decrease of 92. I say “apparent” because, for the purpose of clarifying the records, new categories have been set up to include Summer Session and Graduate students and these two groups are counted by themselves. Had the reckoning been made as previously, the registration this session would show an actual gain of 75 students, or almost 10%, as compared with the increase of 41 students, or 5.75%, of the year 1929 over 1928.

Statistics of the registration under the various degrees and schools follow:

Degree.	Year.	Men.	Women.	Totals.
B.A.	1	41	28	69
	2	32	75	107
	3	27	31	58
	4	25	43	68
		<hr/>	<hr/>	<hr/>
		125	117	302

B.Sc.	1	5	1	6
	2	22	6	28
	3	18	3	21
	4	21	9	30
		<hr/>	<hr/>	<hr/>
		66	19	85
B. Comm.	1	12	9	21
	2	17	9	26
	3	13	5	18
	4	10	3	13
		<hr/>	<hr/>	<hr/>
		52	26	78
B.Sc. in Household Economics	1	0	17	17
	2	0	26	26
	3	0	18	18
	4	0	14	14
		<hr/>	<hr/>	<hr/>
		0	75	75
B.H. Economics	1	0	3	3
	2	0	1	1
	3	0	0	0
		<hr/>	<hr/>	<hr/>
		0	4	4
B.Sc. in Pharmacy	1	1	0	1
	2	1	2	3
	3	2	0	2
	4	0	2	2
		<hr/>	<hr/>	<hr/>
		4	4	8
B.A. and B.Sc. in Agriculture.....	1	0	0	0
	2	1	0	1
	4	4	0	4
	4	2	0	2
		<hr/>	<hr/>	<hr/>
		7	0	7
B.A. and B.Sc. in Applied Science.....	1	1	0	1
	2	3	0	3
	3	2	0	2
	4	0	0	0
		<hr/>	<hr/>	<hr/>
		6	0	6
B.A. and LL.B.	1	6	1	7
	2	7	0	7
	3	5	0	5
	4	7	1	8
		<hr/>	<hr/>	<hr/>
		25	2	27
B.A. and M.D.	1	5	1	6
	2	11	1	12
	3	4	0	4
	4	8	0	8
		<hr/>	<hr/>	<hr/>
		28	2	30

B.Sc. and M.D.	1	0	0	0
	2	5	2	7
	3	5	0	5
	4	5	1	6
		<hr/>	<hr/>	<hr/>
		15	3	18
B.A. and D.D.S.	1	0	0	0
	2	2	0	2
	3	0	0	0
	4	1	0	1
		<hr/>	<hr/>	<hr/>
		3	0	3
Special Students	10	8	18	
Total number of Undergraduates	341	320	661	

Reviewing these figures, we note the following changes in 1929-30 in relation to 1928-29:

B.A.	+ 56
B.Sc. in Arts	+ 12
B.Comm.	+ 8
B.Sc. in Household Economics	+ 8
B.Sc. in Pharmacy	— 7
B.A. and B.Sc. in Agriculture.....	No change
B.A. and B.Sc. in Applied Science	+ 2
B.A. and LL.B.	— 4
B.A. and M.D.	No change
B.Sc. and M.D.	+ 5
B.A. and D.D.S.	+ 1
Special Students	—14

It will be noted that the increase has affected all categories except the degree course in Pharmacy and the combined course in Arts and Law. This may, however, be merely the swing of the pendulum. A year ago, I commented on the fact that the B.A. was just holding its own and the number of men had actually declined. It is a pleasure now to report that, while the women have increased by 18, the men have increased by 38. Commerce and Household Economics, both continue their onward march, the former showing a rise roughly of 11% and the latter 12%. It may be noted that the women coming from the Schools of Agriculture to study household economics, who have hitherto been listed in the faculty of Agriculture, will hereafter be classed with the School of Household Economics.

The registration in the Summer Session increased from 86 in 1928 to 101 in 1929—17%. With the close connection between the School of Education and the Summer Session, the latter is likely to show from now on a steady development. Last summer the University provided facilities for a successful master course in music, given by the eminent pianist, Mr. Norman Wilks. This year the course will be repeated, but directly under the auspices of the University.

If the professional musicians and the music-loving public support this effort, it might well prove to be the beginning of a very significant development in the years to come.

The total number of officers giving instruction in this faculty during 1929-30 has been 20 professors, 11 associate professors, 13 assistant professors, 7 lecturers, 9 instructors, and 26 assistants and demonstrators; a total of 86.

Staff promotions during the year in this faculty included those of Alexander Joseph Cook from the rank of assistant professor to that of associate professor of Mathematics; John MacIntyre Cassels from lecturer to assistant professor of Political Economy; and Norman McKee Stover from lecturer to assistant professor of Chemistry.

Once more I should like to record my appreciation of the loyal and unflagging efforts of my colleagues to exact and maintain high standards of work.

W. A. R. KERR,
Dean.

REPORT OF THE DEAN OF THE FACULTY OF AGRICULTURE

The student attendance in the faculty of Agriculture is slightly larger than last year. More students have come through the Schools of Agriculture—about fifty per cent. of the students in the year are from the Schools, the remainder coming, of course, from the high schools. Provision is now being made at the School of Agriculture at Vermilion to give matriculation training similar to that which has been given during the past few years at Olds. This course is of direct benefit to our students, but we have been rather disappointed at the number coming on to the University after taking advantage of this provision made in their interest by the Department of Agriculture. There is no doubt that financial conditions in the country have had a good deal to do with this, parents in many cases not feeling able to give the boy more than three years' training at the Schools.

In view of the fact that our Diploma course has been so poorly attended, our faculty has thought well to recommend that it might be dropped. There is a feeling that the matriculation course at the Schools and our Diploma course were rather at cross purposes. In any case, the attendance scarcely justified the maintenance of this course.

Our Short Course this year was rather a disappointment; the enrolment being only thirty-four as compared with somewhat over a hundred two years ago. There can be little doubt but what a marked interest in the mechanical side of agriculture has resulted in young men attending short courses given by agricultural machinery com-

panies, courses dealing chiefly in the work of the tractor. At the time that our course was being held there were one hundred and seventy-five students enrolled in the tractor school given by the International Harvester Company. The Department of Agriculture has put on several two and three-day courses at different points throughout the province. These have been well attended by people who could drive in for the day. Members of the faculty of Agriculture took part in nearly all of these courses.

Plans have been laid during the past year to move the Animal Husbandry barns to the south farm. The rapid increase in building in Garneau and particularly the expansion of the University Hospital has made it absolutely necessary to have the live-stock buildings removed from such close proximity. Negotiations for more land are under way, and it is planned to conduct all of the Animal Husbandry work at the south farm. It will be necessary to transport our students to the farm for laboratory work. A certain amount of land has been leased by the Field Crops, Animal Husbandry and Soils departments.

During the past year, there has been an increasingly heavy call upon the members of the staff of this faculty to take part in outside enterprises. As just mentioned, a large number of lectures were given at the short courses put on by the Department of Agriculture, also in connection with other activities of the department; in membership boards and in other conferences. Other lectures were given under the auspices of our department of Extension. At least two lectures per week were given over radio CKUA. One can scarcely over-estimate the value of this latter type of service where we reach literally thousands of people in place of hundreds. The public reaction to this particular part of the radio service has been very gratifying to us.

Our Publications Committee has issued the following publications during the year:

Bulletin No. 6, "Plows and Plowing," 4th edition.

Bulletin No. 10, "Binder and Knotter Troubles," 3rd edition.

Bulletin No. 19, "Sheep Production in Alberta."

Circular No. 6, "The Production and Preparation of Seed for Exhibition."

These are distributed by the department of Extension. In addition, many articles prepared by members of our staff have appeared in leading scientific agricultural journals. A special opportunity has been given us in the comparatively new journal, "Scientific Agriculture" published by the Canadian Society of Technical Agriculturists. This really has a world-wide circulation and has brought the work of the members of our staff to attention otherwise not available.

We would like to mention our gratification in that the head of our Animal Husbandry department, Professor Sackville, was, during

the year, elected to the presidency of the Canadian Society of Technical Agriculturists. We might also call attention to the fact that the head of the department of Field Crops has been giving a considerable part of his time to the organizing of work for the National Research Council and acting in an advisory way to the Chairman of that Council. During the past year he visited Europe under the auspices of the Council. We are indebted to the National Research Council for assistance in carrying out work in the department of Field Crops, Soils and Animal Husbandry. Mention might be made of the fact that the dean of the faculty was engaged, during the last summer, in an advisory capacity by the International Joint Commission. The following are a few notes department by department:

Poultry.

The greatest part of the time of the department during the past year has been devoted to the carrying out of various research problems, and to the laying of plans for a more extensive programme of experimental work both at the University and at the Provincial Poultry Plant at Oliver.

In May, 1929, a series of experiments was commenced at the Poultry Plant of the University of California, to determine the protein requirements of growing chicks, and more specifically to calculate their protein utilization at different stages of growth. This work was continued there throughout the summer and then during the fall and winter at the University of Alberta, space and equipment being allotted to us for the work in the Medical building through the courtesy of the Biochemistry department.

Entomology.

Investigation work in this department has followed a study of wireworms, cabbage root maggot, wheat stem sawfly and a study of the general insect conditions in Alberta.

With the acquisition of the complete set of the Transactions of the American Entomological Society, consisting of fifty-five volumes, a start has been made towards building up a working library. This has proved to be indispensable in naming representatives of our local fauna.

During the year a complete card catalogue to all taxonomic literature, available for the use of students, was prepared.

Horticulture.

This department is now in a position to expand in its work of plant propagation. A piece of land back of the University residences has been cleared and prepared and will be partly planted this year. We should have some interesting reports in the next two or three years in regard to strain and varieties of shrubs, vegetables and flowers.

Dairy.

The co-operative yeast and mold investigations carried on by the Provincial Department of Agriculture and the department of Dairying were continued. More intensive research on the problems paramount to the dairy industry of this province is contemplated in the near future.

This department co-operated with the Dominion and Provincial Departments of Agriculture in conducting a Clean Milk and Cream Competition held in conjunction with the Calgary convention of the Alberta Dairymen's Association and assisted with the programme of this convention. Consultations and advisory relations with the Board of Health of the City of Edmonton and with the local dairy concerns have been particularly gratifying. Correspondence with creamery operators and dairy farmers throughout the province desiring information was considerable.

Agricultural Engineering.

The work of this department has been carried on along the lines as laid down in previous reports.

Particular interest is aroused at present in the field of machinery. The increased use of the tractor and the advent of the Combine Harvester has had a most profound effect on farm operations. The large bulk of our farmers scarcely know how to adjust themselves to the new conditions. There is a proneness to take extreme attitudes, and this department has been called upon to act in an advisory capacity in many cases. Particularly has there been a call for radio and short course service.

The department has maintained a very satisfactory relationship with the larger machinery companies. By reciprocal arrangement the head of this department has been able to assist these companies in short courses and they, in turn, have been generous in the matter of donations to our laboratory equipment.

Soils.

The soil surveys were considerably expanded during the past year. These surveys now embrace:

(a) The regular soil surveys conducted in co-operation with the Department of Agriculture. During the past year the regular survey consisted of further work in outlining the major soil belts in addition to the survey of the Edmonton sheet.

The fourth soil survey report, that of the St. Ann Sheet, is now in the hands of the printer and will soon appear as Bulletin 20. This covers an area of approximately one and one-quarter million acres and extends from Stony Plain on the east to Entwistle on the west. This area is comprised of soils representative of three of the major soil belts.

(b) The northern surveys which are conducted by the Provincial Research Council for the purpose of determining areas suitable for settlement before such settlement has actually taken place. Three such parties made surveys during the past year, and reports have been submitted to the Government covering these areas. These three parties obtained information covering approximately eight million acres.

In addition to the soil survey our experimental work covers:

- (a) A series of fertilizer experiments carried on at Breton.
- (b) Co-operative fertilizer trials at eight different points.
- (c) Determinations of periodical fluctuations in nitrates under different crops and cultural practices.
- (d) Biological investigations of soils from different parts of Alberta.
- (e) Possible plant food deficiencies in wooded soils of Alberta.
- (f) Determinations of fertilizer deficiencies in soils.
- (g) Characteristics of typical profiles in Alberta.
- (h) Soil analyses.

Veterinary Science.

The work of the Provincial Veterinarian, who is now on the University staff, has been carried on in conjunction with the Animal Husbandry department and with the members of the staff of the faculty of Medicine. It is rather early to report more than this at present, but within a year or two there should be some interesting reports available.

Field Crops.

The cereal breeding programme with wheat, oats and barley has as its object the production of varieties which are superior in yield, earliness, quality and resistance to drought and disease. In wheat, special attention is of course given to milling and baking quality, and in barley the malting quality is considered. This programme is being prosecuted by the introduction and testing of varieties produced in other places, and by crossing varieties to combine desirable characters. During the present season a wheat variety introduced from Russia proved to be conspicuously drought resistant, and an early smut-resistant oat variety from the United States gave promising results.

The breeding of hardy varieties of winter wheat has been greatly facilitated by the freezing plant now available. By exposing young plants to low temperatures in the cold chambers, it is possible to get in a few weeks information as to their frost-resistance which formerly it took years of field experimenting to obtain.

A disease garden is conducted co-operatively by those concerned in cereal and plant disease investigations. Here all varieties are

exposed to an artificial epidemic of all the diseases common in Alberta. New varieties which prove susceptible to any serious disease are discarded.

Progress has been made in the production of pure-breeding types of alfalfa, and in the study of seed-setting problems. A number of strains have been selected which show great promise as seed-yielders.

Plant biochemical investigations, especially on problems concerning the milling and baking quality of wheat, have been continued on quite a large scale, with generous support from the National Research Council. The effect of soil and climatic conditions and of frost injury on wheat quality, the artificial drying of tough and damp wheat, the relative quality of all wheat varieties commonly grown in Western Canada, the effect of crop sequence and association on wheat quality both on dry land and under irrigation, the comparative adaptations of different varieties to our average climatic conditions, and a number of fundamental problems, are all under investigation.

Animal Husbandry.

The work in this department has been simply the carrying on of work as outlined during previous years, completing some experiments and introducing others. The following is a partial list of experimental work being carried on:

- (a) The second year's trial comparing self and hand feeding of grain for finishing calves.
- (b) The comparison of oat hay and oat silage for feeding market calves.
- (c) The value of wheat of different grades for growing and finishing pigs with a determination of its value per bushel thus used.
- (d) The influence of inheritance on the rate of growth and economy of gain.
- (e) The influence of feeds on firmness of fat and quality of carcass produced.
- (f) The adding of inorganic iron to the ration.
- (g) Study of the relative value of various feeds and the manner of feeding young pigs.
- (h) Within the past year an extensive programme of research work in co-operation with the National Research Council has been a study of the various climatic and dietary factors influencing the growth and quality of wool.

Our annual Feeders' Day resulted in an attendance of over two hundred people coming from different parts of the province to obtain

first hand knowledge of the live stock experimental work carried on during the year.

The department of Animal Husbandry performs an extensive service in the matter of what might be called field work. There is a very heavy correspondence carried on chiefly in an advisory capacity. There is a big demand for members of our staff in the matter of addressing different breeders' conventions.

The department competed again at the Royal Fair at Toronto. It is not generally understood that this exhibition is now the largest on the continent, and competition there is keen. The entries from the University made a satisfactory showing, winning three first places, four seconds, and two thirds, as well as winning the championship in the Hereford and Angus competitions, Reserve Championship in the Shorthorn competition and Reserve Grand Championship in the entire market class competition. For the first time we showed some breeding stock, winning one first, one second, two thirds, one sixth and an eighth place. In three herd competitions our herd stood second each time.

There is not much change in the number and classification of live-stock. We had a particularly trying year last year owing to the drouth which made it difficult to carry over with the limited amount of land at our disposal.

E. A. HOWES,
Dean.

REPORT OF THE DEAN OF THE FACULTY OF APPLIED
SCIENCE

Dr. Robert W. Boyle resigned his deanship last fall, and as his successor I record with particular pleasure on behalf of all his former Applied Science colleagues our appreciation of his fine services to the work of the faculty of Applied Science during his term as dean. A suitable resolution is on the minutes of the faculty council recording this sentiment and our regret on losing him, together with congratulations on his new appointment and best wishes for continued success.

This year the enrolment has again increased. Last year there were 208. This year there are 235, distributed as follows:

First Year	61
(Including 1 woman)	
Second Year	77
Third Year	38

Fourth Year	30
Fifth Year	23
	— 229
Combined Course	6
	—
	235

The revision of curriculum referred to in the two previous annual reports was completed this year and approved by the Senate at the February meeting. Two transition years will be necessary to bring it completely into effect.

The problem of space, laboratory equipment and personnel still remains serious. This year we had to resort to an extraordinary expedient for the classes in Drawing and Descriptive Geometry, using Convocation Hall as a draughting room. Next fall, even this space is likely to be insufficient. More laboratory equipment will be obtained this summer and some addition will be made to the junior staff.

Researches and professional work by the staff were carried on during the summer and space time in term to the usual extent.

R. S. L. WILSON,
Dean.

REPORT OF THE DEAN OF THE FACULTY OF MEDICINE

The number of students registered under the faculty of Medicine during the past session was 216. These figures include 36 dental students, 11 students in the B.Sc. course for nursing, and 1 special graduate student.

Medicine.

Status.	Men.	Women.	Total.
First Year	21	4	25
Second Year	38	5	43
Third Year	21	1	22
Fourth Year	28	1	29
Fifth Year	30	1	31
Sixth Yer	17	2	19
	—	—	—
	155	14	169
	—	—	—

If we add 14 students registered in Arts for Medicine.....	14
and 48 students registered in the combined course in	
Arts and Medicine	48
we have a total of 231 students proceeding to a degree	
in Medicine	155*
	—
	217
	—

*NOTE.—The double course students in second year Medicine are registered under the Arts faculty (14). Total students in second year Medicine, 43.

Dentistry.

Status.	Men.	Women.	Total.
First Year	6	0	6
Second Year	6	0	6
Third Year	11	0	11
Fourth Year	7	0	7
Fifth Year	6	0	6
	36	0	36

NOTE.—In addition to the students in fourth year Arts and Dentistry included in second year of Dentistry, there are two students in the second year of Arts and Dentistry, and four students in Arts for Dentistry, making a total of 42 students whose objective is a degree in Dentistry.

B.Sc. Course in Nursing.

First Year	6
Second Year	3
Fifth Year	2
	11

Two students are recommended for the degree of B.Sc. in Nursing.

In the recent examinations six students in the department of Dentistry in the final year were successful, and nineteen in the final year of Medicine are recommended for degrees.

The proposed extensions of clinical facilities for teaching and other purposes mentioned in last year's report are well in progress, and during the next session the recent additions to the University Hospital, together with the Provincial Special Hospital and the Red Cross Hospital will be available for teaching purposes, so that we will have in close proximity with the University buildings a hospital of 300 beds for teaching purposes, in addition to our affiliation with the other hospitals in the city. It should be mentioned also that the outdoor department, which, in the early years of its inception, struggled along with difficulty, is now firmly established with a large attendance. This valuable work places within the reach of the poor of the city the well-trained staff of the University and the University Hospital.

It is a pleasure to be able to say that all the graduates in Medicine, who desired to be, have been placed in suitable institutions for the continuation of their medical education and experience.

The University Senate has approved of a recommendation from the faculty of Medicine that the degree of Bachelor of Science in Medicine be instituted, in order to encourage selected students to take further training in the pre-clinical subjects of the Medical course.

A considerable amount of research work has been carried out and published in the medical and other journals.

The faculty has been strengthened by the addition of Dr. G. Hunter and Dr. A. R. Munroe as professors of Biochemistry and of Surgery respectively.

ALLAN C. RANKIN,

Dean.

REPORT OF THE DEAN OF THE FACULTY OF LAW

During the present year there were registered in the faculty of Law thirteen students in the first year, nine in the second year and eight in the third year, making a total of thirty. There are twenty-seven students in the University taking the work of the earlier years of the combined course in Arts and Law.

The number at present attending in the law courses is about the same as the number we have had in the last few years. For the next three years we may expect, judging from the pre-legal registration in Arts, a slight increase in the number of those entering upon professional law work.

The raising of the entrance requirements, the application of the "sixty per cent" rule, and the predominance of Arts graduates in the students taking law are factors tending to raise the general standard of work done by students in this faculty. The size of the various classes, viz., about ten in each year, lends itself to a satisfactory application of the case method of instruction. Larger classes would tax our present library facilities to an extent which might impair the efficient working of our present system of instruction.

The number of graduates which we are turning out each year is not in excess of the demands of the province for such men. I have at present two requests for men whom we cannot supply. Graduates, generally, put in the required year of service in cities or judicial centres. Recently, there is a marked movement of the younger men after their call to the bar to the smaller towns and the newer sections of the province. There is no marked migration of our graduates to foreign countries or to other provinces.

During the year informal discussions have taken place with the Legal Education Committee of the Benchers of the Law Society with respect to certain problems which have arisen. The question of the raising of the entrance requirements to four years of Arts was considered, but it was felt that, for the time being, the standard might remain as it is. The two year requirement now existing is that found in most of the provinces, and it was felt that it might be inexpedient to take independent action in the matter.

The Education Committee of the Benchers is proposing an amendment to the Legal Professions Act, raising the minimum age at which a person may be called to the bar from twenty-one to twenty-three years. This proposed amendment will have no effect on our combined course students who constitute the majority of our graduates. It may furnish an inducement for a younger student who proposes to go directly from second year Arts into Law to spend another year in the Arts faculty. The Benchers feel that a little greater maturity and experience of the world is desirable in order to ensure a proper feeling of responsibility on the part of young practitioners first starting upon the independent practice of their profession.

The Education Committee is likewise proposing an amendment to the Legal Professions Act whereby Arts graduates who have taken the degree in law as well may be required to put in their year of service after graduation in one continuous period instead of in three four-month periods in the vacations of their Law School years. The University and legal vacations correspond more or less, and it was felt that a student putting in his service piecemeal during the summer months did not get an adequate and normal experience in practical office work. This criticism seems just. Saskatchewan has already adopted the system which the Benchers propose.

During the year Mr. Dixon Craig was granted leave of absence because of illness. Mr. L. Y. Cairns was appointed by the Board to take over Mr. Craig's work. We are pleased to know that Mr. Craig has sufficiently recovered to be able to resume his work next year.

During the year assistant professor Nielson was absent on leave teaching on the staff of the Stanford Law School. I regret to announce that assistant professor Nielson has now resigned from the staff of the faculty here to become a permanent member of the Stanford faculty. Assistant professor Nielson's successor has not yet been appointed.

During Professor Nielson's absence, Mr. S. W. Field, K.C., Mr. Harvey and Mr. Dyde gave us part time assistance.

J. A. WEIR,
Dean.

REPORT OF THE PROVOST

I.—Student Government.

During the session 1929-30 some very important changes have been put into effect in connection with student government.

(1) In accordance with amendments to the constitution of the Students' Union passed during the session 1928-29, the Students' Council has assumed full legislative and administrative authority over the members of the Students' Union, subject only to the veto

power of the Students' Union and reservations of authority vested in the Committee on Student Affairs and the President of the University.

Provision has been made, however, for two meetings of the Students' Union, in the fall and in the spring; also for special meetings which shall be called upon the presentation of petitions signed by one hundred members of the Union. Such meetings may exercise the veto power mentioned above.

(2) A Disciplinary Committee of five members has taken the place of the Students' Court. This committee exercises disciplinary authority under the Committee on Student Affairs over all male students, subject to certain reservations made in the case of students in residence whose conduct while in residence comes under the supervision of the House Committee.

The procedure of this committee in dealing with cases of misconduct has been as informal as possible, and attention has been directed, not so much to proving the guilt of offenders, as to setting up proper standards of conduct and giving guidance wherever necessary.

Although some fairly severe penalties have been exacted in certain cases, no appeals have been made to the Committee on Student Affairs. The work of the committee has been most satisfactory to the University authorities and to the student body, and deserves special commendation.

(3) The constitution of the Students' Union has been further amended to provide for a Women's Disciplinary Committee, organized on a basis similar to that of the Men's Disciplinary Committee.

II.—Revision of Constitution.

During the past summer a committee worked on the revision and consolidation of the constitution and statutes of the Students' Union. This work has been very satisfactorily completed and the revised constitution has been printed.

III.—Students' Union.

The work of the Students' Union has gone very smoothly during the session. Much credit is due to the President, Mr. D. Cameron, for the very able leadership he has given, and also to the other members of the Council who co-operated with him to make the work of the year of outstanding merit.

IV.—Athletics.

Despite the fact that the Track and Rugby championships went from the University of Alberta to the University of Saskatchewan, the year has been very satisfactory from the point of view of athletics. The loss of Mr. Sterling, who has for the past two years

coached the Rugby and Basketball teams, will be keenly felt. Mr. Sterling has, during these two years, made a very valuable contribution in the way of establishing healthy traditions in University athletics.

The Women's Track team and the Women's Basketball team won the Western Inter-University championships.

V.—Debating.

The University of Alberta won the McGoun Cup, emblematic of the Western Inter-University Debating championship.

VI.—Fraternities and Sororities.

During the session the Senate Committee on Fraternities and Sororities authorized two fraternities and three sororities. Although no definite plans as yet have been formulated to exercise what control is necessary over these organizations, the policy will undoubtedly be as consistent as possible with the present system of student government as a whole; which is to place the maximum responsibility upon the students themselves.

VII.—Medical Services.

In the work of the Medical Services the session has been a normal one. The greater part, if not the whole of last year's deficit—which resulted from epidemics—will be wiped off.

J. M.MacEACHRAN,
Provost.

REPORT OF THE COMMITTEE ON GRADUATE STUDIES

The registration of students working under the supervision of the Committee on Graduate Studies has stood during the past session at 75 as against 64 a year ago. While this total indicates a substantial growth over 1928-29, it is still below the 82 of 1927-28 and 84 of 1926-27. On the whole, however, this figure of 75 is very satisfactory in view of our restricted constituency and the fact that during the last four preceding years we have granted 74 higher degrees.

During the session of 1929-30 the following institutions have been represented amongst our graduate students:

Acadia	3	Manitoba	6
Alberta	49	McGill	1
British Columbia	1	McMaster	1
Concordia Theological Sem- inary (St. Louis)	5	Mount Allison	1
Durham (England)	1	Queen's	1
Landwirtschaftliche Hoch- schule (Berlin)	1	Saskatchewan	1
		Toronto	5
		Western Ontario	1
Men, 57; Women, 18.			

The candidates for the various degrees are classified as follows:

M.A.	35
M.Sc.	22
(Arts, 13; Agriculture, 8; Applied Science, 1)	
B.Educ.	5
Special	13

The following candidates, having satisfactorily met the requirements prescribed by the Senate, are recommended by the Committee on Graduate Studies for their respective degrees:

For the degree of Master of Arts:

Brown, Rieta Luella	Shanks, Margaret
Cotsman, Alexander	Sterling, J. E. Wallace

For the degree of Master of Science:

Brewer, Randolph George	Peto, Frank Herbert
Drake, Wray Vernon	Reiber, Harold George
Field, George Sydney	Welsh, John Nicholas
Foster, William Robert	Young, Roland Stansfield
Hicks, Harold Smith	

For the degree of Bachelor of Education:

Simpson, Maimie Shaw	Swift, William Herbert
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W. A. R. KERR,
Chairman,
Committee on Graduate Studies.

PRIZES, SCHOLARSHIPS, MEDALS AND GIFTS

Scholarships

The Robert Tegler Trust.—The trustees of the Robert Tegler Trust are providing ten scholarships for free tuition at the University for three years, and awarded as follows on the basis of highest standing in the matriculation examination for University entrance (Grade XI):

Two to Victoria High School,
One to Eastwood High School,
One to Westmount High School,
One to Garneau High School,
One to Strathcona High School,
One to the Roman Catholic Separate High School,
Three to the Province at large, exclusive of Edmonton.

One Research Scholarship at \$600 for one year to a graduate student in any faculty of the University who desires to prosecute research at the University, the award to be made on the recommendation of the Committee on Graduate Studies.

The *Canadian National Committee for Mental Hygiene* has agreed to give to the department of Philosophy an annual gift of \$3,500 to be used for instruction and research work in mental hygiene.

The *Calgary Dental Society* offers a scholarship to the value of \$50.00 to be awarded to the student having the highest general standing in all subjects during the second, third and fourth years of

Dentistry at the University of Alberta, to be awarded only after the student has registered in the fifth year of Dentistry at the University of Alberta.

The *Women's University Club Scholarship* open to women students only on the results of the June Grade XII examinations has been increased by the Club from \$75 to \$100. It is awarded for the highest standing in English (Literature and Composition), History, French and Latin, provided the student passes at least three other units, making a total of at least eight fourth-year high school units and obtains a mark of 75% in each of the four subjects named. The scholarship is payable to the student in attendance at the University during the session following the award and will be applied towards defraying the fees of tuition.

Medals

The *President's Gold Medal* in Nursing is offered by President R. C. Wallace, to be awarded for general proficiency in the three years of the Diploma course.

The *Duncan Alexander MacGibbon Gold Medal* in Political Economy is offered by Dr. Duncan Alexander MacGibbon to be awarded to the student who receives the highest average standing in four courses in the department of Political Economy, one of which must be a course in the general principles of Economics, and provided that the student's record is considered satisfactory by the faculty of Arts and Sciences.

Prizes.

Nursing.

A prize of books is offered by Dean W. A. R. Kerr for the highest standing in the work of the fourth year of the degree course in Nursing.

A prize in intermediate year Nursing is offered by Dr. E. L. Pope, to be awarded for general proficiency in the intermediate year of the Diploma course.

The Board of Governors of the University offer book prizes as follows:

- (a) For general proficiency in senior year nursing.
- (b) For highest standing in examinations in senior year nursing.
- (c) For highest standing in the practical work of senior year standing.

Dentistry.

The *Alberta Dental Association* offers two prizes each to the value of \$50.00 to be awarded as follows:

- (1) To the student with the highest general standing for the work of the third year in Dentistry;

- (2) To the student with the highest general standing for the work of the fifth year in Dentistry;

These two prizes to be awarded at the end of the third and fifth years respectively.

In making these awards, consideration will be given not only to scholastic attainments, but also to character and interest in student activities.

The Bulyea Prize.—A prize of books to the value of \$20.00 is offered annually by Dr. H. E. Bulyea to the student having the best general standing in the work of the second year in Dentistry.

In making this award consideration will be given not only to scholastic attainments, but also to character and interest in student activities.

Law.

The National Trust Company Prize.—A prize of books to the value of \$30.00 is offered by the National Trust Company to the student of the graduating class in Law who has made the best record in the examinations in Equity 1, Equity 2, Real Property 2, Real Property 3 and Wills and Administration. A student is ineligible for this prize if his average in the examinations of the second and third years of the Law course is less than 75%.

English.

The The Arthur Blow Condell Prize of the value of of \$25.00 is offered by Dr. W. N. Condell, and is awarded to the undergraduate student making the best record in English 1, providing such student secures first class standing in English 1, and that his standing in his other courses is satisfactory to the faculty council.

Chemistry.

The Ewart Beresford Memorial Prize of the value of \$25.00 in books is offered annually by Mr. T. F. Beresford, B.A., in memory of his son, Ewart Beresford. It is awarded to the graduating student in the faculty of Arts and Sciences who takes the highest average mark in Biochemistry 61 and three senior courses in Chemistry, and whose standing is satisfactory to the faculty council.

Dairying.

The *Canadian Dairy and Ice Cream Journal*, Toronto, has offered a prize of three years' subscription to the Canadian Dairy and Ice Cream Journal to the student receiving the highest grade in Dairy 1, Dairy 54 and Dairy 56, and a prize of one year subscription to the student receiving the highest grade in the dairy short course.

Gifts.

The University is in receipt of a gift from Sheldons, Ltd., Galt, Ont., of a No. 15, design 6, Keith fan to be used for teaching purposes in Civil Engineering 57—Applied Thermodynamics.

From the J. A. Werner Hardware Company of Edmonton, a picture of Lord Kelvin, the great physicist.

The University Library is in receipt of the following gifts:

From the Government of France through His Excellency, Jean Knight, Minister of France, Ottawa, a gift of books in modern French literature.

From the Dramatic Society of the University the sum of \$75.00 to be used towards purchasing books of drama.

From the Women's University Club of Edmonton the sum of \$25.00 for books in the department of History.

From the Smithsonian Institute, eleven volumes of annual reports.

From the Trustees of the British Association, two volumes on Entomology.

From Mr. A. Cristall and Mr. H. A. Friedman, K.C., fifty volumes of Hebrew literature, as the nucleus of a University Semitic collection.

From the American Law Book Company, a set of books, "Corpus Juris."

From Mr. G. L. Law, eighteen volumes of Engineering News.

From the Institute of Civil Engineers, volumes for 1929.

From Mr. A. W. Miller, 32 volumes of Canadian Statutes.

From Mrs. J. Macalister, fifteen volumes of Law books.

From the Royal Bank of Canada, publications on Canadian Economic Problems.

From Miss E. M. Johnstone, several volumes of early medical works.

From the late Professor Muir Edwards' library, several volumes of engineering journals.

Also gifts of books from the following: The Mental Hygiene Committee, Rev. Mr. U. Roberts, Mr. E. A. Corbett, Dr. H. R. Thornton, Dr. N. B. Eddy; Mr. W. Dixon-Craig, Mr. Burleigh, Canon F. G. Scott, Dr. J. L. Petitclerc, Brother Memoriam, Mr. C. S. Burgess, Dr F. Reed, Dr. Heber Jamieson, Mr. G. Harcourt, Dr. Fahrue, Prof. Bunbaro Kyota, Dr. L. C. Harris, League of Independent Democracy, Metropolitan Life Insurance Company, Science Association.

The following donations have been made to the department of Geology and to the palaeontological, archaeological and ethnological museum:

Vertebra of dinosaur from Mr. D. S. McKay of Spruce Grove.

From Mr. Bowman, Government Buildings, Edmonton: (a) Specimen of chipped chert, (b) specimen of quartzite chipped in form of a scraper.

Suite of 39 mineral specimens, many of which are of museum quality. These are mostly from pegmatites in New England states, from Dr. M. E. Hurst, Providence, R.I.

From Mr. P. D. McArthur, Kimberley, B.C., specimen of lead-zinc ore.

Sullivan Lake, Kimberley, B.C., two particularly fine specimens of calcite variety dog-tooth spar, Sullivan Mine.

From Mr. William Clarkson, Lewton, Alta., specimen of dolomitic limestone carrying bitumen.

Fourteen agates, from Mr. Andrew Pancel, Fort McMurray.

Marcasite nodule, from Dr. L. J. O'Brien, Grande Prairie.

Vertebra of dinosaur, from Mr. D. A. McDougal, Greenshields, Alta.

Bayonet used in the battle of Alma and bullet from Fort Louis-berg, Cape Breton, from Mr. George W. Lewis, Athabaska, Alta.

Two particularly fine specimens of galena ore with marcasite, several specimens of non-metallic and metallic minerals, 53 fossil specimens from the Palaeozoic in Ohio, stone hammer, stone pedestal and several Indian arrow points, from Mr. W. M. Wilson, Airdrie, Alta.

Fossilized resin from the Bush Mine coal seam from Mr. G. E. Hepburn, Bush Mines, Ltd., Edmonton.

Rand conglomerate, South Africa, from James Wallbridge, Edmonton.

Fossil specimens, from Roy L. Fowler, Aldersyde, Alta.

A particularly fine specimen of gold quartz heavily laden with free gold from Lorne Gold Mines, Ltd., Bridge River, B.C., from N. H. Atkinson, B.Sc., a graduate of the University of Alberta.

Fossil specimen, from Miss A. Murray, University of Alberta.

Specimens of spodumene and amblygonite, museum quality, from Etta Mine, Keystone, S.D.; from Dr. R. S. Sandin, University of Alberta.

Tooth of *Elephas primogenius*, from Mr. J. Spittel, Watine, Alta.

Egyptian usbebti, determined by Oriental Institute, University of Chicago, as an interesting and valuable mortuary statuette, dating latter half of the 18th dynasty (about 1450 B.C.), from Mr. M. C. Wright, 9908 115th St., Edmonton.

The Canadian S.K.F. Company, Ltd., Toronto, have presented to the University for teaching purposes four sample ball and roller bearings with museum type case.

STUDENTS STUDYING ABROAD

A number of students of the University of Alberta are studying in foreign universities, some as the result of scholarships awarded within the province and others having obtained scholarships or fellowships from the universities where they are now pursuing a course of study. The following list of those studying and the

auspices under which they are studying is an indication of the growth of this tendency on the part of our Honour students:

Under the Rhodes Scholarship system Ronald Martland, B.A., LL.B., and G. F. G. Stanley, B.A., are continuing their studies at Oxford, and Hugh W. Morrison, B.A., who was appointed Rhodes Scholar this year, has just begun a three years' course at Oxford.

Mr. M. H. Halton, B.A., is continuing his course of study at the University of London under a grant from the Imperial Order of the Daughters of the Empire. The Overseas Scholarship of that organization has been awarded to Miss Margaret Roseborough, B.A., for the year 1930-31. Miss Roseborough is pursuing her studies in London.

Mr. Donald Sproule, B.Sc., M.Sc., is continuing his studies at the University of London under the auspices of the 1851 Exhibition Scholarship.

The French Government Bursary Scholarship for a year's study in France was awarded to Miss Ethel Hartley, B.A.

Robert U. Harwood, M.Sc., who was instructor in the department of Biochemistry, is proceeding towards his Ph.D. degree at McGill University.

W. D. Drake, Honours Chemistry, M.Sc., is doing post-graduate work in Organic Chemistry towards his Ph.D. in the University of Wisconsin.

Miss Marion Jamieson, B.A., is doing post-graduate work at the University of Washington.

G. W. Klingaman, M.Sc., is doing post-graduate work in Organic Chemistry towards his Ph.D. in Northwestern University.

W. M. Kutz, B.Sc., is doing post-graduate work at the University of Wisconsin.

R. L. Kutz, M.Sc., is proceeding towards his Ph.D. degree in Biochemistry at McGill University.

J. P. McKenzie, B.Sc., is doing post-graduate work in Organic Chemistry towards his Ph.D. at Northwestern University.

W. H. Meuller, B.Sc., is doing post-graduate work at McGill University.

H. G. Reiber, M.Sc., is proceeding towards his Ph.D. degree in Physical Chemistry at the University of California.

R. E. Richardson, B.Sc., is doing post-graduate work in Physical Chemistry towards his Ph.D. degree at McGill University.

M. D. Sturrock, B.Sc., is studying towards a higher degree at McGill University.

J. N. Sutherland, M.Sc., is proceeding towards his Ph.D. in Physical Chemistry at McGill University.

J. M. Zeavin, M.Sc., is doing post-graduate work in Chemistry at the University of Toronto.

J. F. McDougall, B.Sc. in Civil Engineering, is working towards his M.Sc. degree at McGill University.

Miss Gwendolyn Mullett, B.A., is tutor in Latin, department of Latin, University of California, and proceeding towards her M.A. degree in that institution.

Miss Mary Ross, B.A., obtained a scholarship in Johns Hopkins University and is studying there towards her Ph.D. degree in Classical Archaeology.

Miss Winnifred Moyle, B.Sc. is pursuing a course of study towards her M.Sc. degree at Columbia University.

Miss Inger Riis is doing post-graduate work at the University of Washington.

R. G. Drinnan, B.Sc., is doing post-graduate work at the Massachusetts Institute of Technology.

A. Leahey, M.Sc., is pursuing a course towards his Ph.D. at the University of Wisconsin.

A number of graduates in the faculty of Agriculture are taking post-graduate work in universities of the United States: E. R. Tinkham, B.Sc., and H. Gray, B.A., are at the University of Minnesota; R. J. Milligan, B.Sc., at the Iowa State College, Ames, Iowa; A. E. Clark, M.Sc., is at the University of Wisconsin; E. J. Bayfield, B.S.A., is at the Ohio State College; W. R. Brown, M.Sc., is at the University of Minnesota.

F. H. Peto, M.Sc., is following a course of study towards his Ph.D. at the University College of Wales, Aberystwith, Wales.

J. W. Hopkins, B.Sc., is doing post-graduate work at Rothamsted Experimental Station, Harpenden, Herts, England.

S. O. Hillerud, B.A., is studying at the Ontario Agricultural College, Guelph.

RESEARCH AND PUBLICATIONS

The yearly list of publications by members of the staff gives some indication of the extent and variety of the research work conducted within the University. It may be of assistance to indicate briefly the scope of the research work in which members of the University staff are engaged. Except for the work done by full time members of the staff of the Research Council of Alberta the work is being conducted in the time which members of the staff may find available from teaching and administrative duties.

It is customary to think of research work in its two divisions of pure and applied research. In a sense there is no ultimate distinction, for the pure science of today may well become the applied science of tomorrow; without the foundation of pure science no applied science is possible. The researches in spectroscopy in the department of Physics may, however, be classified as investigations

in pure science; so also the investigations in bird migration in the department of Zoology; and in peat bog flora in the department of Botany. Much of the field work in the department of Geology is a direct contribution to the field of pure science, though the immediate economic value of the work in coal horizons and water bearing horizons is evident. In the department of Field Crops much of the investigation in Cytology is of fundamental theoretical value, though its significance in the work of plant breeding is immediate. The investigational work in mental hygiene, in the department of Philosophy and Psychology, is an application of psychology to the problems of retarded development and incipient mental disorder. In the department of anatomy studies have been made on the mammalian heart, and in the department of Psychology and Pharmacology the physiological effect of alkaloids has been studied in a long series of experiments.

The problems with which the Research Council of Alberta have dealt with are naturally of a directly practical kind—the utilization of the northern tar sands, the geological exploration of the coal areas and the chemical investigation of the nature, composition, and coking qualities of our coals, the derivation of benzol and ethelyn glycol from the Turner Valley waste gas, the elucidation of the water problems in northern areas, the utilization of power on the farms and the best use of local timber for mine props. In these researches the staffs of the departments of chemistry, mining engineering, geology, civil engineering and electrical engineering take full part, in addition to the work done by the full-time members of the Research Council staff. In association with the National Research Council at Ottawa there is carried on much of the work on waste gas in the department of Chemistry, the work on plant diseases, cereal breeding and winter resistance in the Plant Pathology laboratory of the department of Field Crops, and the investigations on calves of the effect of the *Bacillus Calmette-Guerin* for immunisation to tuberculosis, conducted by the departments of Bacteriology, Serology, and Veterinary Science. Experiments in animal nutrition are being carried on by the department of Animal Husbandry in hogs and steers, and the department of Poultry in chickens. The use of fertilizers is being studied on a variety of soils by the Soils department, and the oxidation-reduction processes in milk by the department of Dairying. Certain reactions of mercury with organic salts have been investigated in the department of Chemistry. In the department of Electrical Engineering some unusual conditions of radio-oscillations were elucidated. In the department of Entomology study was continued on the life history of the wireworm and the cutworm; and in horticulture new ground was set aside and planted for the study of varieties of small fruits suitable to our conditions.

It is not possible in the nature of things to tabulate concretely, as in the experimental sciences, the work which goes forward in the

field of scholarship in the non-scientific, literary and humanistic studies. Reference should, however, be made in this statement to the studies in phases of Canadian history, the work in German literature and philology, the analysis of method of approach in the study of arithmetic, the influence of Sir Walter Scott in France, the archaeological background to the classical period, problems of world marketing, the editing of English and French texts, as an indication of the variety of study on which members of the staff are engaged in the non-scientific fields. Taken altogether—and the above resume does scant justice to what is cited and none to other work which is at hand—the members of the staff of the University are doing their part in a very generous way in advancing the realm of knowledge and in unravelling the practical problems of our country.

The following is the list of publications for the year:

By President R. C. Wallace: "The humanism of science," *Proceedings of the Fourteenth Annual Conference of Canadian Universities*, 1930, pp. 32-40.

The Department of Agricultural Engineering.

By Professor J. MacGregor Smith: "Plows and plowing," *University of Alberta Agricultural Bulletin*, No. 6, fourth edition, revised January, 1930; "Ropework for the farm," *Bulletin* No. 9, third edition, revised July, 1930.

The Department of Anatomy.

By Dr. D. G. Revell: "Methods and problems of medical education," seventeenth series, pp. 51-59, *The Rockefeller Foundation*, New York.

By Dr. D. G. Revell and A. E. Clarke: "Monozygotic triplets in man," *Journal of Heredity*, v. 21, pp. 146-156, Washington, D.C.

By Dr. R. F. Shaner: "On the development of the nerves to the mammalian heart," *Anatomical Record*, v. 46, pp. 23-39.

Department of Animal Husbandry.

By Dr. J. E. Bowstead: "The effect of breeding immature ewes," *Scientific Agriculture*, No. 7, March, 1930.

Department of Chemistry.

By Dr. R. B. Sandin and J. W. Sutherland: "Ethyl and hexylfluorescein. Their dibroma and monomercury derivatives," *Journal of the American Chemical Society*, 51, 1773 (1929).

By Dr. R. B. Sandin and Dr. N. M. Stover: "A rapid method for the determination of organic nitrogen in liquids," *Canadian Journal of Research*, 2:264-266, 1930.

By Dr. R. B. Sandin and W. V. Drake: "Some derivatives of diphenyl sulfide and diphenyl ether," *Journal of the American Chemical Society*, 52, 3353 (1930).

By Dr. E. H. Boomer and A. W. Saddington: "On the hydrogenation of bitumen from the bituminous sands of Alberta," *Canadian Journal of Research*, 2:376:1930.

By Dr. E. H. Boomer and H. E. Morris: "The formation of ethane in the catalytic decomposition of ethyl alcohol," *Canadian Journal of Research*, 2:384:1930.

Department of Classics.

By Dr. W. H. Alexander: "The Classics in a liberal education, *per se* and *per alia*," *Proceedings of the Fourteenth National Conference of Canadian Universities*, pp. 47-56.

Department of English.

By Dr. E. K. Broadus: "The Laureateship" (a lecture given at the Royal Chapel of the Savoy in London on May 7, 1930, and published in the *London Mercury*, June, 1930.

By R. K. Gordon: "Sir Walter Scott's French visitors," *The Dalhousie Review*, January, 1930.

Department of Entomology.

By Professor E. H. Strickland: "Phagocytosis of internal insect parasites," *Letter to Nature*, Volume 126, p. 95, July 19, 1930.

Department of Field Crops.

By Dr. R. Newton: "Report on inquiry in Europe regarding the feasibility of using protein content as a factor in grading and marketing Canadian wheat," *National Research Council of Canada*, 22 p., 1930.

By Dr. R. Newton and J. G. Malloch: "Variation in the quality of wheat grown in replicate plots," *Scientific Agriculture*, 10 (10), 669-677, 1930; "Time of plowing brome grass sod in relation to the yield and quality of the succeeding wheat crop," *Scientific Agriculture*, 10 (9), 607-611, 1930.

By Dr. J. R. Fryer: "Alfalfa as a forage crop in Western Canada," *Scientific Agriculture* (10) (8), 530-538; "Alfalfa in Alberta," *University of Alberta College of Agriculture Circular* 8, 23, 1930; "Cytological studies in medicago, melilotus and trigonella," *Canadian Journal of Research*, 3 (1), 3-50, 1930.

By Dr. A. W. Henry: "Disinfection of seed potatoes," *University of Alberta, College of Agriculture Circular* 7, 12 p., 1930.

By Dr. O. S. Aamodt and J. M. Manson: "The production and preparation of seed for exhibition," *University of Alberta, College of Agriculture Circular* 6, 11 p., 1930.

By W. H. Cook and J. G. Malloch: "Yeast testing," *Cereal Chemistry*, 7 (2), 133-142, 1930; A volume-measuring apparatus for small loaves, *Cereal Chemistry*, 7 (3): 307-310,, 1930.

By A. E. Clarke and D. G. Revell: "Monozygotic triplets in man," *Journal of Heredity*, 21 (4), 147-156, 1930.

Department of Geology.

By Dr. J. A. Allan: Report of Progress for 1928, Geological Survey Division, included in Report 24, Ninth Annual Report, Research Council of Alberta, pp. 20-38; Report of Progress for 1929, Geological Survey Division, included in Report 25, Tenth Annual Report, Research Council of Alberta, pp. 27-47.

Directed publication and printing of: Geological Map No. 14, Geological map of part of Peace River and Grande Prairie districts, Alberta, compiled by R. L. Rutherford and accompanying Report No. 21; Report No. 21, Geology and water resources in parts of the Peace River and Grande Prairie districts, Alberta, by R. L. Rutherford, Research Council of Alberta.

By Dr. P. S. Warren: Description of new species of fossils from parts of Peace River and Grande Prairie districts, Alberta. Appendix to Report No. 21, Research Council of Alberta, August, 1930.

By Dr. R. L. Rutherford: Geology and water resources in parts of the Peace River and Grande Prairie districts, Alberta, Research Council of Alberta, August, 1930, Report No. 21.

Geological Map of Part of Peace River and Grand Prairie Districts, Alberta; Research Council of Alberta, August, 1930.

Department of History.

By Dr. Ross W. Collins: "The rise and development of the idea of the real presence in the Eucharist," *The Chronicle*, Vol. XXV, No. 3, March, 1930; "The parish priest and his flock as depicted by the councils of the twelfth and thirteenth centuries," *The Journal of Religion*, Vol. X, No. 3, July, 1930.

By Dr. George Buxton: "L'Influence de la revolution Americaine sur le developpement constitutionnel du Canada, 1774-1791," published by E. de Boccard, Paris, 1928.

Department of Mathematics.

By Dr. A. J. Cook: "A unifying principle in mathematics," *A.T.A. Magazine*, Vol. 10 (1929), pp. 1-3; "Mathematics and education," *A.T.A. Magazine*, Vol. II (1930), pp. 12-15.

By E. S. Keeping: "On the damped oscillation of a conductor in a non-uniform magnetic field," *Philosophical Magazine*, Vol. 9 (1930), pp. 16-22.

Department of Law.

By Dean J. A. Weir: Articles and notes, *Canadian Bar Review*.

Department of Philosophy.

By Dr. H. E. Smith: "The validity of teachers' judgments of difficulty in curricular material," *Journal of Educational Psychology*, September, 1930.

Department of Physics.

By Professor Stanley Smith: "Extension of the spectrum of thallium II," *Physical Review*, 1929, Vol. 35, pp. 235-239; "A note on the spectrum of doubly ionised and trebly ionised lead," *Physical Review*, 1930, Vol. 36, pp. 1-4.

By Mr. L. H. Nichols: "Measuring forest fire hazard," *Canadian Woodlands Review*, 1929, Vol. I, p. 11, 12, 24, 39; "Meteorological and forest fire hazard conditions in the province of Quebec," privately published by the Quebec Industries Association, Ltd., 60 p., illus.

By Mr. D. K. Froman: "Young's modulus determined with small stresses," *Physical Review*, 1930, Vol. 35, pp. 264-267.

By D. K. Froman and Dr. R. B. Boyle: "Reflection of sound energy and thickness of plate reflector," *Canadian Journal of Research*, 1929, Vol. I, pp. 405-424.

By Dr. E. H. Gowan: "Low frequency sound waves and the upper atmosphere," *Nature*, Vol. 124, No. 3125, p. 452, September, 1929; "The effect of ozone on the temperature of the upper atmosphere, II," *Proceedings of the Royal Society, A*, Vol. 128, 1930, pp. 531-550.

Department of Physiology.

By Dr. A. W. Downs and Dr. N. B. Eddy: "The influence of tyramine on the number of red corpuscles in the circulating blood," *Proceedings of the Society for Experimental Biology and Medicine*, 1930, XXVII, 405.

By Dr. S. Gelfan: "Studies of single muscle fibres I, The all-or-none principle," *American Journal of Physiology*, 1930, XCIII, 1.

Department of Poultry.

By Helen I. Milne and V. S. Amundson: "Inheritance of plumage and skin color in the Ancona," *Scientific Agriculture*, Vol. X, No. 5, January, 1930.

Department of Soils.

By Dr. F. A. Wyatt and Dr. J. D. Newton: "Legume inoculation," Circular, revised and printed April, 1930.

By Dr. F. A. Wyatt and O. R. Younge: "Preliminary soil survey adjacent to the Peace River, Alberta, West of Dunvegan," Report No. 23, Research Council of Alberta, May, 1930.

By Dr. F. A. Wyatt, Dr. J. D. Newton and Dr. T. H. Mather (with Appendix I by Dr. J. A. Allan), Messrs. A. Leahey and J. L. Doughty assisted with the field, analytical and mapping work during the course of the preparation of this report: "Soil survey of St. Ann Sheet," Bulletin No. 20, University of Alberta, April, 1930.

By Dr. J. D. Newton: "Seasonal fluctuations in numbers of micro-organisms and nitrate nitrogen in an Alberta soil," *Scientific Agriculture*, Vol. 10, No. 6, February, 1930.

By Dr. J. L. Doughty: "The fixation of phosphate by a peat soil," *Soil Science*, Vol. 29, No. 1, January, 1930.

By Dr. T. H. Mather: "The effect of fertilizers upon the forms of phosphorus and the amounts of phosphorus, nitrogen and silica in hays," *Scientific Agriculture*, Vol. 10, No. 1.

Department of Zoology.

By Dr. W. Rowan: "The mechanism of bird migration," *Science Progress*, July, 1930, No. 97, pp. 70-78; "Experiments in bird migration—II, reversed migration," *Proceedings National Academy Science*, Vol. 16, No. 7, July, 1930, pp. 520-525.

By Dr. W. Hughes: "The twinning condition in swine," *Proceedings Royal Canadian Institute*, Vol. XVII, pt. 2, pp. 209-216, pl. V-VI, bibl.

By Dr. W. Hughes, G. R. Moore and T. F. Gallagher: "Rat seminal-vesicle cytology as a testis-hormone indicator and the prevention of castration changes by testis-extract injection," January, 1930, Vol. 45, No. 1, pp. 109-135, pl. 1-2, bibl.

Department of Industrial Research.

By Professor Edgar Stansfield: "Yard sticks for fuels," *Canadian Chemistry and Metallurgy*, Vol. XIV, No. 8, August, 1930, p. 234.

By Professor Edgar Stansfield and J. W. Sutherland: "The classification of Canadian coals," *The Canadian Mining and Metallurgical Bulletin*, p. 1158, October, 1929; "Determination of mineral matter in coal and fractionation studies of coal," *American Institute of Mining and Metallurgical Engineers*, New York meeting, February, 1930.

By Dr. K. A. Clark: "The separation of the bitumen from Alberta bituminous sands," *The Canadian Mining and Metallurgical Bulletin*, p. 1385, December, 1929.

THE HIGH SCHOOL AND THE UNIVERSITY

In recent years much thought has been given to the better adaption of the content of the high school curriculum to the needs of the high school student. The high school is today the college of the people and not merely the training school for those who desire a university education. The type of training which has been considered necessary as a preparation for the University is not the best training for a large number of students who do not intend to enter the University. For this reason courses other than the "academic" course have been devised—commercial, technical, agricultural courses. Such courses are well devised, but are not elected by the students of the high schools, except in very small numbers. Many students are in doubt, in the early years of the high school course,

as to what their life choice is to be. They wish to leave open the possibility of university training, and choose the academic course. Many parents have the feeling that any choice but the academic is a second best choice, and advise in favour of the academic course. With the limited teaching staff of the ordinary high school, no alternative to the academic course can be offered, and the subjects of instruction are such as meet the entrance demands of the University and Normal Schools only. It is more than doubtful whether it is in the best interest of many students now in high school to attempt the academic course; and criticism is not infrequently levelled at the university because of the academic colour which it gives to the whole high school programme. The standards of entrance to the university are not too high, and are, indeed, low in comparison with entrance standards in other countries. The solution to the problem does not lie in lowering the standards of entrance. The question arises, and demands careful thought, as to whether one type of course, with very limited options, may not well serve the needs of the entrance requirements to university and normal school and at the same time provide the best educational background for those who are not to go forward to higher education. If a course strong in the social sciences, literature and science could be set up, with limited options as to foreign language and mathematics, it might be feasible to exact a high pass mark for entrance to university, and a lower pass mark for graduation from high school. The main purpose of university entrance tests is to ensure that only students with the necessary mental ability are admitted. It is unfair to brand as failures high school students who cannot reach this standard. It would seem not impossible to establish a course with educational values adequate to meet the needs of both types of students. It is proposed to explore the situation to see whether practical proposals may be put forward.

HONOURS AND LOW PASS STUDENTS

Among the large body of students who desire university training, there are two groups, both of them relatively small, who claim attention. It is generally agreed that insufficient attention has been given to the student of superior mental ability. Because of the large classes of students of average ability, he has had to mark time, and his energies have been directed into other channels. He is the student who will abundantly repay special attention, and even from the beginning of his university work should be under special guidance. It is for this student that the honours courses in the faculty of Arts and Sciences have been instituted. These courses give an adequate undergraduate specialized training for the able student, and are lacking only in that for the first three years of the five year Honours course the student has no greater demands made on him in range of subject than are required from the average

student. By the co-operation of the Freshman Committee, the Honours Committee and the department concerned, it will be possible to arrange in those earlier years for additional reading for able students, not to be required for examination, but in order to widen their mental horizon and build securely the foundation for later specialization. There is the financial burden of the additional year of study, which bears heavily on some students. There is a measure of responsibility which institutions of higher learning must share in assisting to remove financial obstacles which might block the path for the ablest students to the course which they should follow. In the scientific subjects it has for some time been the practice to assist such students by appointing them to positions of laboratory demonstrators in the final years of their Honours course. In the literary subjects the need for senior student assistants is not so great; but any financial provisions which may be found possible will greatly promote sound scholarship among the students in the arts and sciences. The student who enquires whether the financial return which the world may be prepared to give the honours trained man is sufficient to justify the selection of the course, may find that the world has not yet adequately discriminated between the man of sound scholarship and the average graduate: though there is little doubt that, in the teaching profession at least, the distinction will be made in salary between the honours and the pass graduate. Scholarship for its own sake has always had, and continues to have, the right appeal for the right mind, and the best talent in the student body will always be attracted to the best that the university has to offer. In undergraduate work the best is in the honours courses, whether in material or in the inspiration of the teacher. There is an intellectual loss when able students select anything less worth while.

If too little care has been given to the very able student, too much has been given to the mentally inferior students. There are students who enter the university with difficulty, and who pass through the university with still more difficulty, or who in their course are advised to leave, because the difficulties are greater than can be overcome. Such students are a heavy burden on the instructors and members of the Freshman Committee. They have chosen unwisely in entering the university, and they do not obtain what the university is capable of giving, because the pass mark is a goal too real for them to see beyond. In part the fault is not with the students themselves. Parents advise unwisely when they direct to the University sons or daughters who are not mentally fitted for academic studies. The University is only one avenue to life: the wide field of business and commerce is another. Through either avenue the way opens up to important fields of public service. The rigid condition which the university makes is that the mental equip-

ment of the students is of sufficiently high level to make it possible to co-operate successfully in the intellectual work of the university. Students just over the margin line of admission to the university should seriously consider whether they cannot more profitably follow another career. They will find a university course very difficult.

Of the student who finds himself in difficulties not through lack of ability but through lack of application little need be said. Whatever be the other fields of training which a university may afford, it would not exist were it not primarily for intellectual training. A student who neglects his main work in the class room and the laboratory wastes not only his own time but that of the university as well. Students of this type, unless under advice they change their attitude to the work of the university, are asked to withdraw.

PHYSICAL NEEDS OF THE UNIVERSITY

During the summer of 1930 the stock barns were moved from the main University grounds to the south farm, where two hundred and thirty-seven additional acres have been acquired. On a good site the buildings have been set up in a very satisfactory way, and the work of the Animal Husbandry department will now be conducted entirely—with the exception of some of the lecture courses—at the south farm. The acreage now released on the home grounds will be available for the Field Crops department for further experimental work. On the main campus a beginning has been made in developing permanent streets, sidewalks and lighting system, and additional work will be carried on year by year as circumstances permit on a unified plan under the direction of the grounds committee in consultation with a landscape architect.

In teaching buildings no relief has been obtained since 1921, when the Medical building was completed. Every available room is taxed to overcrowding. The Convocation Hall has been made available for drafting work in the Applied Science course, and can now be used for its own legitimate purposes only at great inconvenience. All the available space in St. Joseph's College has been rented for class-room purposes. Corridor space is used for laboratory work in accountancy. The library building asked for last year is an urgent necessity. Not only is the library much overcrowded and quite inadequate for the needs of the university as it now is, but relief will be obtained in the library building for the Extension department, now very unsatisfactorily housed, and for the Applied Science courses, for which seven thousand square feet of floor space will be set aside in the library building temporarily for drafting room purposes. It is unnecessary to elaborate a situation which is critical.

An Applied Science building will be the next teaching building in the expansion of the University. The field of Applied Science

offers great attraction to our students, and the greatly increased numbers are already a serious problem in laboratory accommodation, aside altogether from the question of drafting space, which has already been discussed. The students have been much concerned about the gymnasium accommodation on the campus. When it was found that the first responsibility of the Government was for library and teaching buildings, the matter of student responsibility for gymnasium and swimming pool has been seriously canvassed. In providing this very necessary building, there is a worthy field for private generosity. The gymnasium would be planned as a wing of a building ultimately to be erected—a Students' Union building designed to play on our campus the part that Hart House plays in Toronto, enriching the student life in Toronto University.

In closing, may I pay tribute to the spirit of the University. Thanks to the fine attitude of the staff and of students, the loyalty and pride of the alumni, the enthusiasm and devotion of the governing boards, and the informed and sympathetic support of the Government, there is in evidence a keenness, a zest and an exploring temper which are, I feel, the real marks of a university.

ROBERT C. WALLACE,

President.

I attach herewith, as Appendices to this Report, the following special reports :

The Report of the Provincial Laboratory, as Appendix I.

The Report of the Industrial Laboratory, as Appendix II.

The Report of the Freshman Committee, as Appendix III.

APPENDIX I.

REPORT OF THE DIRECTOR OF THE PROVINCIAL LABORATORY

1928-29—1929-30

I have the honour to submit the following report of the work done in the Provincial Laboratory during the period from March 31st, 1929 to March 31st, 1930.

The total number of examinations for the year was 34,718. Co-operation with the University departments has continued and the work of the laboratory has thereby been facilitated. The chemical examination of water and milk has been carried out by the Provincial Analyst.

TABLE No. 1

Table No. 1 shows the nature of the examinations performed.

	Total No. Specimens 1928-29	Total No. Specimens 1929-30	In- crease	De- crease
Communicable Diseases:				
Sputum	673	774	101	.....
Diphtheria	1,067	2,302	1,235	.....
Typhoid Fever	232	373	141	.....
Waters	1,598	1,767	169	.....
Milks	949	1,606	657	.....
Mothers' Milk	22	33	11	.....
Miscellaneous Examinations	2,440	2,259	.....	181
Smears for the presence of the				
Gonococcus	2,616	2,743	127	.....
Bloods for the Wassermann Test	12,264	12,545	281	.....
Pathological Histological Material	5,658	5,959	301	.....
Medical Legal Examinations	14	15	1	.....
Icterus Index Determination	2,809	158	.....	2,651
Van Den Bergh Determination	2,809	2,837	28	.....
Post Mortem Examinations:				
B.W.D. Agglutinin Tests	14,541	506	.....	14,035
Cattle Blood Examinations .....	.....	719	719	.....
Total	47,787	34,718	3,798	16,867

TABLE No. 2

Table No. 2 shows the number of water and milk, special, and blood containers prepared and distributed during the year.

Containers.	1928-29.	1929-30.
Water Containers	807	1,130
Special Containers	2,327	4,588
Blood Containers	9,015	9,624
Chicken Blood Containers	10,855	506
Total	23,004	15,848

TABLE No. 3

Table No. 3 shows the number of cubic centimeters of autogenous and other vaccines prepared during the year.

Vaccines and Serums.	1928-29.	1929-30.
Typhoid Vaccine	5,510 cc	6,625 cc
Autogenous Vaccine	3,250 cc	3,125 cc
B.C.G. Vaccine	1,860 cc	3,040 cc
Poliomyelitis Serum	360 cc	290 cc
Total.....	10,980 cc	13,080 cc
Increase in number of cubic centimeters, 2,100.		

TABLE No. 4

Table No. 4 shows the detail of some of the work done by the laboratory in relation to the control of infectious diseases.

Diseases.	No. of Posi- tives	Specimens Nega- tives	No. of Physi- cians	No. of Post Offices
Pulmonary Tuberculosis	118	656	.....	.....
Diphtheria	236	2,066	.....	.....
Typhoid Fever	47	326	273	137
Total.....	401	3,048	273	137

Month.	Sputum.	Diphth.	Ty.Fever.	Total.
April	61	112	72	245
May	96	155	56	307
June	85	184	37	306
July	70	119	26	215
August	63	75	17	155
September	38	106	27	171
October	62	116	46	224
November	52	349	25	426
December	59	200	10	269
January	59	165	15	239
February	57	331	17	405
March	72	390	25	487
Total.....	774	2,302	373	3,449

Number of Specimens Examined, 1928-29.....	1972
Number of Specimens Examined, 1929-30.....	3449
Increase in Number of Specimens	1477
Increase in Per Cent.	74.8

TABLE No. 5

Table No. 5 shows the number of blood examinations by the complement fixation test for the diagnosis of Syphilis.

Bloods Received	12,725
Bloods Examined	12,545
Bloods Positive to reaction	1,768
Bloods Negative to reaction	10,777
Bloods unsuitable for examination	180
Increase in Number of Specimens	281
Increase in Per Cent.	2.2
Bloods Received from Calgary and South.....	3,827
Bloods Received from North of Calgary	8,718
Number of Blood Examinations made in 1928-29..	12,264
Number of Blood Examinations made in 1929-30..	12,545

Pathological Histological Material.

During the year 5,959 specimens have been examined—an increase of 301 specimens, 5.3%. This work is under the direction of Dr. J. J. Ower.

TABLE No. 6

Table No. 6 gives the details of the bacteriological and chemical examination of water performed throughout the year.

	1928-29	1929-30
Number of samples of water examined bacteriologically and found unfit for human consumption	55	40
Number of samples of water examined bacteriologically and found fit for human consumption	921	894
Number of samples of water examined bacteriologically and chemically and found fit for human consumption	462	660
Number of samples of water examined bacteriologically and chemically and found unfit for human consumption	43	68
Number of samples of water examined chemically and found fit for human consumption	107	80
Number of samples of water examined chemically and found unfit for human consumption	4	9
Number of samples of ice examined bacteriologically and found fit for human consumption	5	10
Number of samples of ice examined bacteriologically and found unfit for human consumption	7	0
Total.....	1,598	1,767
Increase in number of specimens	169	
Increase in per cent.	10.5	

TABLE No. 7

Table No. 7 gives the details of the bacteriological and chemical examination of milk performed throughout the year.

	1928-29	1929-30
Number of samples of milk examined bacteriologically	834	1,432
Number of samples of milk examined bacteriologically and chemically	115	174
Total.....	949	1,606

	1928-29	1929-30
Number of milks examined showing low butter fat.....	14	20
Number of milks examined bacteriologically with bacterial count above 30,000	58	79
Number of non-pasteurized milks examined bacteriologically with bacterial count above 300,000.....	75	114
Increase in number of specimens.....	657	
Increase in per cent.....	69.2	
Number of pasteurized samples examined	131	350
Number of non-pasteurized samples examined.....	818	1,256

Miscellaneous Examinations.

There were 2,259 miscellaneous examinations during the year. These are of a very varied nature and include the examination of food, body fluids, etc., etc.

Medico-Legal Examinations.

This work has included various examinations pertaining to criminal and other cases in the Province throughout the year.

Smears for the Gonococcus.

There were 2,743 examinations made during the period covered by this report—an increase of 127 specimens.

Chicken Blood Examinations.

There were 506 chicken blood examinations made for the diagnosis of bacillary white diarrhoea.

Cattle Blood Examinations.

Seven hundred and nineteen cattle bloods were examined for the diagnosis of contagious abortion.

Research Work.

The work in tuberculosis research has progressed.

Convalescent Poliomyelitis Serum.

In co-operation with the Department of Health and Doctors Mewburn, Huckell and McGougan it has been possible for the laboratory to prepare enough convalescent poliomyelitis serum to meet the demands in connection with the cases reported during the time under consideration.

Staff.

During the time under consideration the interest and loyalty of the staff have greatly contributed to the efficiency of the laboratory.

I have the honour to be, Sir,

Your obedient servant,

ALLAN C. RANKIN,

Director.

Attention is drawn to the estimation of the commercial value of the work performed during the year.

Estimated Value of Work if Minimum Charge Were Made.

	No. of Specimens	Price per Specimen	Total
Sputum	774	\$ 2.00	\$ 1,548.00
Diphtheria	2,302	2.00	4,604.00
Typhoid Fever	373	2.00	746.00
Waters	1,767	15.00	26,505.00
Milks	1,606	5.00	8,030.00
Mothers' milk	33	2.00	66.00
Miscellaneous examinations	2,259	3.00	6,777.00
Smears for the presence of the Gonococcus	2,743	2.00	5,486.00
Bloods for the Wassermann test.....	12,545	5.00	62,725.00
Pathological histological material.....	5,959	5.00	29,795.00
Medico-Legal examinations	15	5.00	75.00
Icterus Index determinations	158	1.00	158.00
Van Den Bergh determinations	2,837	1.00	2,837.00
Chicken blood examinations:			
B.W.D. agglutinin tests	506	.10	50.60
B.C.G. vaccine (10 c.c. quantities).....	304	3.00	912.00
Typhoid vaccine (25 c.c. quantities)	265	1.00	265.00
Autogenous vaccines (25 c.c. quanti- ties)	126	15.00	1,890.00
Poliomyelitis serum (10 c.c. quanti- ties)	29	5.00	145.00
Cattle bloods	719	.15	107.85
Total.....	34,596		\$152,722.45

Post mortems not included.

Vaccines not included in number of specimens.

Serums, etc., Distributed

April 1st, 1929—March 31st, 1930

Smallpox vaccine	26,050 points
Diphtheria antitoxin	3,207—1000 units
	528—2000 units
	631—5000 units
	1,254—10,000 units
Diphtheria toxoid	1,379—1 person
	842—6 persons
	850—12 persons
Schick	91—1 to 25 persons
Scarlet fever antitoxin	2,407—2 cc syringe
	273—15 cc syringe
	415—15 cc vial
Scarlet fever toxin	532—1 person
	514—6 persons
Dick	75—1 to 10 persons
Tetanus	31—1500 units
Antimeningitis	190—20 cc
Pertusis	7—5 cc P.D. Co.
	23—20 cc P.D. Co.

APPENDIX II.

THE REPORT OF THE INDUSTRIAL LABORATORY

Regarding the work of the Industrial Laboratories carried on by the Provincial Analyst, the following report is submitted:

Examinations and Analyses.

Air-examination for contamination	13	Formaldehyde	2
Alloys	8	Gasoline and distillate	18
Anti-freeze compounds	4	Gelatine	1
Argyrol	2	Glucose	1
Arsenic-valuation	1	Graphite	1
Arsenic paste	1	Gypsum, detailed analyses on	17
Asbestos	1	Hyosine	2
Asphalt	1	Ice cream	7
Baking powder	2	Instruments	6
Bate	1	Jelly	1
Beans	1	Lime	1
Bituminous sand	2	Limestone, detailed analyses	1
Biscuits	2	Linseed	2
Blood	2	Liquors, detailed analyses for Alberta Liquor Control Board re checking of stocks and seizures and complaints—wine, brandy, rum, whisky, gin, ale, alcohol, etc.	121
Blood, special analyses	5	Malt liquors, samples taken from warehouses, breweries and hotels to determine quality	362
Blankets, valuation of quality	15	Samples from Enforcement Branch, Alberta Liquor Control Board	133
Boiler compound	2	Samples from provincial police, local police officers, etc.	61
Bones, special analyses	5	Samples received from Alberta Breweries and Distributing Company	326
Borax	1	Samples received from Excise Department	16
Brine	1	Special	3
Bread	3	Lobster paste	1
Butter	13	Marl	5
Calcium Chloride	1	Meat and meat products	16
Canning compound	1	Malt	1
Chemicals	4	Medicines	13
Chicken excrement	1	Mercury	1
Cherries	2	Metals	7
Chocolate	1	Milk, cream	120
Cider	2	Milk, human	6
Clay and shale	30	Milk, dried	2
Cloth	8	Milk, evaporated	1
Coal	182	Milk, skimmed	1
Chick bone	3	Molasses, detailed analysis re food value	1
Coal ash	2		
Cocaine, Opium and Narcotic Drug Act	5		
Coffee	2		
Coke	1		
Cracklings and tankage	4		
Creosote	1		
Custard	1		
Egg powder	4		
Feed stuffs	37		
Feeds, detailed analyses	13		
Fertilizer	1		
Fire exhibits	13		
Flax	1		
Flavoring extracts	25		
Flour	3		

Morphine, Opium and Narcotic Drug Act	15	Sodium Thiosulphate.....	1
Oil	119	Soap	19
Oil, examination of water.....	4	Solutions, standard	2
Oil cake meal	4	Starch	2
Oil sand	1	Strychnine	3
Ores, minerals, rocks, examinations for prospectors, etc.	389	Sugar	1
Opium, Opium and Narcotic Drug Act	26	Trional	4
Paint	2	Talc	1
Pills	5	Vacuum cleaner dust	2
Pickles	1	Volcanic ash	1
Pine Tar	3	Water, sanitary	582
Poison investigations, human, animal, etc.	144	Water, boiler	37
Poison, rat	2	Water, special	9
Pork fat, special examinations	91	Washing soda	3
Quinine	2	Weed killer	15
Rock dust	14	Wheat	2
Saline solutions	2	Wort	2
Salt	7	Xylol	1
Sludge	2	Zinc chloride	2
Sand, concentrates, etc.	55	Miscellaneous examinations	64
Soils for lead and arsenic..	20	Materials of construction :	
Soda	2	Cement	240
Sodium sulphate	2	Chains	1
Sodium citrate	1	Concrete	244
		Steel rods	4
		Sand, gravel and rock re design of mix	14
		Wire	2
			3865

The Provincial Analyst was required to spend considerable time in giving evidence in courts throughout the province and in consultation with members of government departments and the Liquor Control Board. Inspections were made for the latter of breweries operating in Alberta.

Assistance was given to and examinations made for prospectors and others interested in natural resources of the province.

Very little time was available for research work along methods of analyses. Investigation analyses were made for several of the University departments.

As in the past, testing of materials of construction was carried out in co-operation with the department of Civil Engineering.

Respectfully submitted,

JAMES A. KELSO,

Provincial Analyst,

Director, Industrial Laboratories.

APPENDIX III.

TENTH ANNUAL REPORT OF THE FRESHMAN COMMITTEE TO THE SENATE

Session 1929-30

The Freshman Committee herewith submits brief summaries of the results in the various groups of first year students, and an analysis of the replies given to the March questions.

On behalf of the Committee,

E. W. SHELDON,

Chairman.

Summaries of Replies to March Questions

March, 1930

First Year Students.

Number of First Year students answering questions..... 103

1. (a) Why did you enrol in the Faculty of Arts and Sciences?

Professional training	45
Liberal education	33
To complete matriculation	17
Uncertain	8
	— 103

1. (b) What vocation do you plan to follow?

Uncertain	35
Medicine	16
Teaching	12
Dietitian	9
Business	7
Law	6
Journalism	3
Theology	3
Applied Science	3
Dentistry	3
Chartered accountant	3
Psychological Research	1
Chemical research	1
Geological research	1
	— 103

1. (d) If no final choice has been made, what vocations are possible choices?

Law	6
Teaching	6
Business	4
Buyer	2
Aviation	2
Literary work	2
Geology	2
Chemistry	2

Chartered accountant	1
Musical conductor	1
Household Economics	1
Lecturing	1
Medicine	1
Journalism	1
Farming	1
Secretarial work	1
Architecture	1
2. (a) Occupations engaged in other than that of a student:	
Teaching	17
Farming	12
Business	8
Clerk	5
Stenographer	4
Bank	3
Salesman	2
Laborer	2
Mechanic	2
Rancher	2
Railroad work	2
Accountancy	1
Dairying	1
Office boy	1
Hairdressing	1
Brokerage	1
Chauffeur	1
Druggist	1
Gardener	1
Sailor	1
Mining	1
Lumbering	1
Carpenter	1
2. (b) Students intending to teach	25
Students considering teaching	4
2. (c) Students attending Normal School:	
Camrose	9
Calgary	7
Edmonton	1
Japan	1
—	18
3. (b) Students taking courses leading to the degree of:	
B.A.	33
B.Sc. in H.Ec.	14
B.Commerce	11
B.Sc. in Arts	6
B.A. (School of Education)	5
—	69
3. (c) Students planning to take Honours Courses:	
English	3
Political Economy	4
Chemistry	1
French and German	1
Mathematics	2
French	1
History	1
Psychology	1
—	14

3. (c) Students considering taking Honours Courses:	
Uncertain (subject)	10
Political Economy	2
Languages	1
	—13
3. (d) Students planning to take the combined courses:	
B.A. and M.D.	5
B.A. and LL.B.	2
B.A. and B.Sc. in Applied Science	2
B.A. and D.D.S.	1
B.Sc. and M.D.	1
	— 14
3. (e) Students intending to leave the Faculty of Arts next session to enter :	
M.D.	11
D.D.S.	2
LL.B.	1
Uncertain	1
	— 15
Students intending to enter a professional faculty after graduation for the degree of:	
M.D.	4
LL.B.	4
B.D.	3
B.Sc. in Applied Science	2
B.Educ.	1
	— 14
4. (a) Students planning to do graduate work for the degree of:	
M.A.	7
M.Sc.	4
B.Educ.	3
Ph.D.	1
	— 15
4. (b) Students planning to do research work in :	
Uncertain	7
Geology	2
Medicine	1
Chemistry	1
Psychology	1
	— 12

New Second Year Students.

Number of new students of the second year answering questions 123

1. (a) Why did you enrol in the faculty of Arts and Sciences?	
Professional training	75
Liberal education	35
Uncertain	13
	— 123
1. (b) What vocation do you plan to follow:	
Teaching	45
Uncertain	20
Dietitian	12
Business	12
Medicine	8
Librarian	5
Law	5

Journalism	4
Geology	3
Sociology	2
Civil Engineer	1
Pharmacy	1
Commercial Art	1
Agriculture	1
Chemical Engineer	1
Theology	1
Banking	1

— 123

1. (d) If no final choice has been made what are possible choices?

Teaching	19
Journalism	7
Librarian	7
Business	7
Law	5
Social Service	3
Interior decorator	3
Chemistry	3
Dietitian	2
Psychology	2
Literary work	2
Geology	1
Accountancy	1
Physics	1
Theology	1
Household Economics	1
Diplomacy	1
History	1

2. (a) Other occupations engaged in other than that of a student:

Teaching	46
Clerk	11
Office work	11
Newspaper work	3
Salesman	3
Farmer	2
Bank	2
Music teacher	2
Saleswoman	2
Library work	2
Dental mechanic	1
Electric work	1
Soldier	1
Railroad	1
Carpenter	1
Leveller	1
Postmistress	1
Cashier	1
Laborer	1
Truck driver	1

2. (b) Students considering teaching	12
Students planning to teach	54

— 66

Students who have attended Normal School:

Calgary	25	
Camrose	20	
Edmonton	3	
Saskatoon	1	
Frederickton	1	
	—	50

3. (b) Students taking courses leading to:

B.A.	43
B.Sc. in H.Ec.	18
B.Com.	16
B.A. (School of Education)	15
B.Sc. in Arts	8
B.Sc. (School of Education)	7
B.Sc. Pharmacy	1

3. (d) Students taking combined courses:

B.Sc. and M.D.	6
B.A. and M.D.	2
B.A. and B.Sc. in Agriculture	2
B.A. and LL.B.	2
B.A. and B.Sc. (Applied Science)	2
B.A. and D.D.S.	1
	— 123

3. (c) Students planning to take Honours Courses:

English	4
Chemistry	4
History	3
French and Latin	2
Mathematics	3
Physics	1
Philosophy	1
French and German	1
French	1
	— 20

Students considering Honours Courses:

Political Economy	4
Mathematics	4
English	2
History	2
Uncertain	1
Psychology	1
French and Latin	1
Chemistry	1
	— 16

3. (e) Students planning to leave the Faculty of Arts and Sciences after graduation to enter a professional faculty:

M.D.	3
LL.B.	3
B.Educ.	3
D.D.S.	1
B.Sc. in Agriculture	1
B.D.	1
B.Sc. in Applied Science	1
	— 13

4. (a) Students planning to do graduate work leading to the degree of:		
M.A.	10	
B.Educ.	7	
M.Sc.	5	
M.Sc. in Engineering	1	
Ph.D.	1	24
4. (b) Students planning to do research work:		
Education	4	
Chemistry	4	
Medicine	3	
Physics	2	
Uncertain	2	
Agriculture	1	
Mechanics	1	
Psychology	1	
Philosophy	1	
Psychiatry	1	20

Registration of Freshmen and New Students of the Second Year.

Applied but did not attend	28
Registered and attended	509

	Men.	Women.	Totals.
Freshmen	190	76	266
New students of second year	151	81	232
Third year	2	0	2
Special students	6	3	9
Withdrawals	22	8	30
Totals.....	349	160	509

Summary of Results

All freshmen and new students of the second year.

	1927-28	1928-29	1929-30
	%	%	%
(P) Passed all subjects	50	40	41
(1) Failed subject	22	22	20
(2) Failed two subjects	13	18	14
(3) Failed three subjects	9	10	12
(4) Failed four subjects	4	6	8
(5) Failed five subjects or more	2	4	5

Same information according to faculties

ARTS I—

	1927-28	1928-29	1929-30
Number of students	114	126	122
	%	%	%
(P)	30	24	30
(1)	31	25	18
(2)	18	20	12
(3)	11	10	24
(4)	7	8	11
(5)	3	13	5

ARTS II (New)—

	1927-28	1928-29	1929-30
Number of students	89	116	154
	%	%	%
(P)	60	53	46
(1)	23	20	21
(2)	9	14	14
(3)	5	5	12
(4)	2	5	3
(5)	1	3	3

APPLIED SCIENCE (Pre-Engineering)—

	1927-28	1928-29	1929-30
Number of students	38	52	54
	%	%	%
(P)	39	32	29
(1)	26	25	20
(2)	11	20	19
(3)	11	12	9
(4)	13	8	17
(5)	0	2	6

APPLIED SCIENCE II (New)—

	1927-28	1928-29	1929-30
Number of students	27	36	51
	%	%	%
(P)	79	42	36
(1)	7	25	21
(2)	3	16	6
(3)	4	11	12
(4)	3	3	13
(5)	4	3	12

AGRICULTURE I—

	1927-28	1928-29	1929-30
Number of students	14	15	17
	%	%	%
(P)	86	67	72
(1)	7	19	6
(2)	7	0	18
(3)	0	14	0
(4)	0	0	6
(5)	0	0	0

AGRICULTURE II (New)—

	1927-28	1928-29	1929-30
Number of students	14	9
	%	%	%
(P)	43	44
(1)	7	0
(2)	29	11
(3)	14	13
(4)	7	11
(5)	0	0

PHARMACY LICENTIATE I—

	1927-28	1928-29	1929-30
Number of students	9	16	19
	%	%	%
(P)	56	25	61
(1)	33	31	16
(2)	0	12	6
(3)	11	12	11
(4)	0	20	6
(5)	0	0	0

MEDICINE I—

	1927-28	1928-29	1929-30
Number of students	11	27	24
	%	%	%
(P)	82	56	71
(1)	9	22	25
(2)	0	14	4
(3)	9	4	0
(4)	0	0	0
(5)	0	4	0

DENTISTRY I—

	1927-28	1928-29	1929-30
Number of students	17	10	6
	%	%	%
(P)	23	50	67
(1)	30	20	16
(2)	23	10	0
(3)	6	10	0
(4)	6	10	17
(5)	12	0	0

NURSING I—

	1927-28	1928-29	1929-30
Number of students	6	6
	%	%	%
(P)	50	17
(1)	0	17
(2)	0	16
(3)	17	17
(4)	33	16
(5)	0	17

PART II.

Financial Statement

UNIVERSITY OF ALBERTA

BALANCE SHEET—MARCH 31, 1930

ASSETS

CAPITAL ACCOUNT:

Land, Buildings and Plant	\$3,613,229.37	
Furnishings and Equipment	939,068.56	
Livestock	28,085.85	
Bond Discount and Expense	362,273.05	
Due from Income Account	57,691.90	
		<u>\$4,754,348.73</u>

INCOME ACCOUNT:

Cash on hand	\$	6,654.57	
Accounts Receivable:			
Sundry debtors	\$31,826.56		
University Hospital	24,355.27		
		<u>56,181.83</u>	
Inventories		72,027.81	
Unexpired Insurance		5,593.29	
Deficit as at March 31, 1929	\$36,067.44		
Less: Surplus for the year ended			
March 31, 1930	4,031.30		
		<u>32,036.14</u>	
			<u>172,493.64</u>

TRUST ACCOUNT:

Securities	\$	513,465.00	
Loans Receivable		1,422.70	
Imperial Bank of Canada Trust Account		55,378.05	
		<u>570,265.75</u>	
			<u>\$5,497,108.12</u>

LIABILITIES

CAPITAL ACCOUNT:

Debenture Debt	\$	450,000.00	
Province of Alberta		4,209,993.75	
Accounts Payable		197.57	
Library Fees Unexpended		5,389.83	
Capital Surplus		88,767.58	
		<u>\$4,754,348.73</u>	

INCOME ACCOUNT:

Imperial Bank of Canada Overdraft	\$	89,154.20	
Accounts Payable		25,647.54	
Due to Capital Account		57,691.90	
		<u>172,493.64</u>	

TRUST ACCOUNT:

Rockefeller Foundation	\$	500,000.00	
Sundry Trusts		70,265.75	
		<u>\$ 570,265.75</u>	
			<u>\$5,497,108.12</u>

Edmonton, June 19, 1930.

I have audited the books and accounts of the University of Alberta for the year ended March 31, 1930, and the above Balance Sheet and Revenue and Expenditure Statement are in accordance therewith. Capital assets are shown at book value and accounts receivable are subject to realization.

I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to exhibit the financial position of the University on March 31, 1930, and the annexed Revenue and Expenditure statement sets forth the result of operations for the year ended at that date.

JAMES C. THOMPSON,
Provincial Auditor.

UNIVERSITY OF ALBERTA

STATEMENT OF REVENUE AND EXPENDITURE FOR THE YEAR ENDED MARCH 31, 1930

REVENUE

Province of Alberta:

Grant	\$525,023.00	
Grant for Debenture Interest and Charges	\$265,417.68	
		\$ 790,440.68
Rockefeller Foundation		25,000.00
Fees		137,166.76
Rentals		23,771.74
Dining Room		7,867.94
Works Department		2,994.20
Bookstore and Post Office		5,316.98
Printing Department		9,978.47
		<u>\$1,002,536.77</u>

EXPENDITURE

Salaries:

Total salaries and wages	\$637,785.82	
Less: Charges to Departments	277,116.25	
		\$ 360,669.57
Debenture Interest and Charges		265,417.68
Agriculture		120,372.59
Laboratories		65,906.37
Light, Heat and Power		35,129.36
Maintenance and Repairs		39,642.41
Department of Extension		29,417.31
Insurance		6,986.82
Bank Interest		1,266.88
Calendars, Press Bulletins, etc.		6,064.18
Teachers' Courses		4,396.67
Summer School		4,450.00
Printing and Stationery		4,649.69
Telephones and Telegrams		2,402.70
Sundries		2,913.24
Library		3,068.25
Special Clinical Services		17,800.00
Travelling Expenses		4,629.01
Upkeep of Motor Cars		1,334.42
Postage and Excise		850.51
Physical Education		1,169.23
Office Machines and Equipment		1,057.23
Inspection and Repairs, Office Machines		241.90
Scholarships and Medals		272.00
Pensions		17,489.20
Bad Debts		928.25
		<u>998,505.47</u>
Net surplus for period.....	\$	<u>4,031.30</u>